The American Artisan
And Hardware Record

Vol. 57. No. 26. CHICAGO, JUNE 26, 1909. $2.00 Per Year.

All Kinds of

BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.

Send for 1909 Catalog "R." Prices on Application.

COLUMBUS BOLT WORKS, Columbus, Ohio

"To discontinue an advertisement," says Ex-postmaster-General John Wanamaker, one of the largest advertisers in the world,—and, naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business you must let the people know it. I would as soon think of doing business without clerks as without advertising."

"NEVER-BREAK"

TRADE MARK

Catalog Free

"NEVER-BREAK"

STEEL SPIDERS, GRIDDLES AND KETTLES

WILL NOT Scale Off like cheap enamel.
WILL NOT Scorch or Burn like light fry pans and skillets.
WILL NOT Absorb Grease or Flavors like cast iron.

THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods

GET THE LIVE LINE

"AMERICAN SEAL"

Elastic Oil Roofing Cement
Stove Putty and Asbestos
Furnace Cement

For Furnaces, Stoves, Ranges and Roofs.
Jobbers write today for prices.

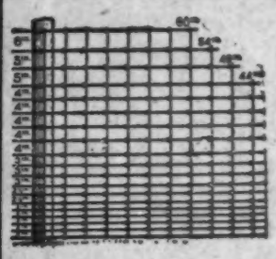
...The...

Wm. Connors Paint Mfg. Co.

Makers TROY, N. Y.

Western Agents: Friedley-Voshardt Co. 194 Mather St., Chicago, Ill.

Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.



The Denning Fence

¶ Is the Fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits.

Write for catalog and prices on Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

The Denning Wire & Fence Co., Cedar Rapids, Iowa.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

Send postal for catalogue.

IWAN BROTHERS
Mfrs. of Hardware Specialties
SOUTH BEND, IND.

MATCHLESS

Spring and Pivot Hinges, Floor Hinges, Jamb Hinges and Hardware Specialties

The Matchless Jamb Hinge is well made of either steel, brass or bronze metal, single and double acting, in all sizes and finishes—for light and heavy doors. Our goods are all of the highest quality. If your jobber cannot furnish them, write us.

LAWSON MFG. COMPANY
40 Dearborn Street, CHICAGO, ILL.

Brilliant Cinderella

A Base Burner With "Git Up and Git"

Heats like a Furnace—Wears like Honesty—Shines like a Mirror—Saves like a Miser.

There is Silent Salesmanship appealing to the prospective Buyer from every part of it.

When you look it over you will want one for yourself.

It is that Kind of a Stove.

Has 5 Flues—Has lift off Nickel.

15 inch size has 10 sq. feet of radiation in back. 13 and 14 inch sizes have proportionate amounts. Fitted so things fit—it will make you forget that you own a file.

Certainly it is a Double Heater.

There are 56,000 Cinderella Base Burners in use.

Wouldn't a line look good on your floor tagged to sell at $35—$40 and $45? Our answer to the question you are about to ask is—

We make Stoves in Pittsburgh;

That accounts for "how we can do it!"

Stove & Range Co. of Pittsburgh

Good Values in Stoves

Pittsburgh, Penn.

(Firepot measurements given are taken inside the firepot.)

How Do You Secure Heating Contracts?

KELSEY HEATED RESIDENCES
Reading, Pa. Wheeling, Va.

If you're selling cheap heaters, doing cheap work, and are securing contracts through being the lowest bidder, you are lowering the Standard of warm air heating, are not building up your own reputation, and the chances are that you are not adding to your wealth.

There's a Better Way, The KELSEY Way

Why not let the other fellow do the cheap work, and join the ever increasing number of dealers who are building up a staple, profitable business through installing Kelsey Warm Air Generators.

Thousands of fine residences in city and country, such as are shown here, are heated and ventilated by the Kelsey System in a manner which is bringing Kelsey dealers in every section of the country good business.

Let us send you our new booklet so that you may **see how the Kelsey is a distinct type of heater** with so many advantages in weight, heating surfaces, method of warming air, power and economy, that it's easy to convince the man who buys a heater for his own use, that the Kelsey would give him most satisfactory, healthful and economical results.

Do you want to see our new booklets, "Warm Air for Kelsey Dealers," "The Triumph of the Kelsey?"

KELSEY HEATING CO., Syracuse, N. Y.

NEW YORK: 156 Fifth Ave. CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 W. Lake St. PHILADELPHIA: 24 So. 7th St.
James Smart Mfg. Co., BROCKVILLE, ONT., Sole Makers for Canada.

The Symbol

A New Air Tight Heater for Coal or Wood

This is a fine large heater, made of the best materials by skilled workmen and is bound to satisfy all the time.

CONSTRUCTION

Draw center grate for coal or wood. Heavy cold rolled steel body. Cast top with large 8-inch cover. Large square feed door 10½ x 12½ inches. Heavy cast bottom, deep hearth with ash pan. Heavy cast outside lining, 8 inches high, which answers for a fire-pot and prevents the steel jacket from warping.

This heater will hold fire as long as any stove made. It is well dressed, the name plate, rings, foot rails, draft damper and urn top being handsomely nickeled.

THE SYMBOL is without an equal on the market for this class of heater.

Write for our complete catalogue of Stoves and Ranges.

We manufacture as complete a line of Hard and Soft Coal Heaters and cast and steel ranges from the highest grade down to the cheapest as any other stove manufacturer in the country.

We have ready a handsome line of Steel Box Stoves (new).

Sheridan Stove Manufacturing Company

Quincy, Ill.

Foster's REGAL

A Profitable Stove to Handle

¶ FOSTER'S REGAL is a good substantial Oak heater nicely finished and sells at a very low price for a stove of its class.

¶ It has a shaking grate with draw center, large ash pan and is surmounted by a handsome urn.

¶ The drum is made of blue polished steel.

¶ As shown by the cut the parts are nicely nickeled and the stove makes a handsome appearance. FOSTER'S REGAL is just as good as it looks

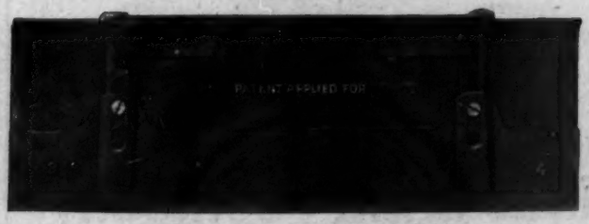
¶ We want one agent in every town and would be pleased to receive inquiries from live, progressive dealers.

The Foster Stove Company
IRONTON, OHIO

We Don't Care Who Made Your Stove
THE "EQUITY" FIRE BACK WILL FIT IT
FRONT VIEW

CLOSED TO 4½x15 INCHES
With Wings Removed Only 14 inches Long
FRONT VIEW

EXTENDED TO 7x21 INCHES
THIS CUT SHOWS BACK SIDE



EXTENDED TO 7x21 INCHES
CAN BE USED AT ANY SIZE BETWEEN THESE EXTREMES
DIRECTIONS: Slacken Bolts on back side, move extension plates to length and width desired—then tighten bolts and it is ready for use.

A New Specialty

As Staple as Eight Penny Nails in a Hardware Store.

Always in Season.

Convenient and Profitable for the Jobber—Dealer and Consumer.

Packed ½ Dozen in a Box.

Ask your Jobber for it. If he does not handle it, write us.

THE PORTSMOUTH STOVE & RANGE CO.
PORTSMOUTH, OHIO.

The Only Correct and Successful Ventilating Stove Ever Produced Is The

"HOWE" VENTILATOR

Its principles are fully endorsed by the highest scientific authorities.

The **"Howe"** supplies fresh air from the outside to be heated, while a corresponding volume of vitiated air is removed from below and discharged well into the smoke flue.

The ventilating capacity is a full 1,600 cubic feet per hour.

This leaves the space heated constantly supplied with fresh warm air, with a temperature fully equalized, varying hardly two or three degrees between floor and ceiling.

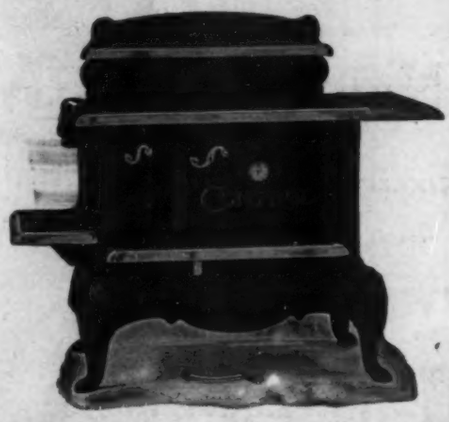
By this simple method it is possible to heat twice the space warmed by an ordinary stove **without any increase in fuel.**

The **"Howe"** is a handsome stove, beautifully nickeled and well made. No other stove ever made has such a combination of merits.

We invite your correspondence. Full descriptive matter will be sent on request.

Sectional Cut Showing Principle.

THE GALUSHA STOVE CO., MAKERS
ROCHESTER, N. Y.



The Greatest Coke Burning Stove the World Ever Saw

CONTROL

IT WILL BURN COAL AS WELL

Send for Booklet for full particulars

Albany Foundry Company, Albany, N. Y.

THE ROYAL QUALITY

All that could be desired in a Range and one which offers every dealer a Royal opportunity to add a big seller to his line.

THE BODY is made of blue steel, lined with asbestos, held in place by sheet steel covering, well riveted.

THE OVEN TOP is arched. Oven bottom is well braced to prevent buckling or warping.

THE FIRE-BOX is arranged with reversible duplex grate, and hot blast linings.

THE RESERVOIR is porcelain lined.

You will like this range and so will your customers. It may be had with the new leg base or with cabinet base. Write for further particulars.

QUALITY STOVE & RANGE CO., - Belleville, Ill.

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

The PENN FAIRY

A VERY EFFICIENT BASE BURNER
OR STRAIGHT DRAFT PARLOR STOVE.

Made under the Registered
TRADE MARK

PENN

By the makers of the PENN line. A certain assurance of quality.

Made in two sizes, either single or double heater.

Our catalog giving particulars is yours for the asking.
WRITE FOR IT.

MT. PENN STOVE WORKS
READING, PA.
111-113 No. 2nd Street, PHILADELPHIA, PA.

HERE'S A SNAP FOR WIDE-AWAKE RANGE DEALERS

I am going to sell 1000 400-lb. six-hole steel ranges finished in Japan for not over

$15.00 Each

I'll sell the ranges too, so you'd better get in line and order now. These Ranges formerly retailed at $60.00 each. Send me a carload order and get my best cash discount, or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money? Do You Know there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them?

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—It means profit DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition. Agents Wanted.

WM. G. WILLARD, No. 119 Willard Bldg., 320 Chestnut St., St. Louis, Mo.

Heavy STEEL Furnace

WITH CAST-IRON HEAD.

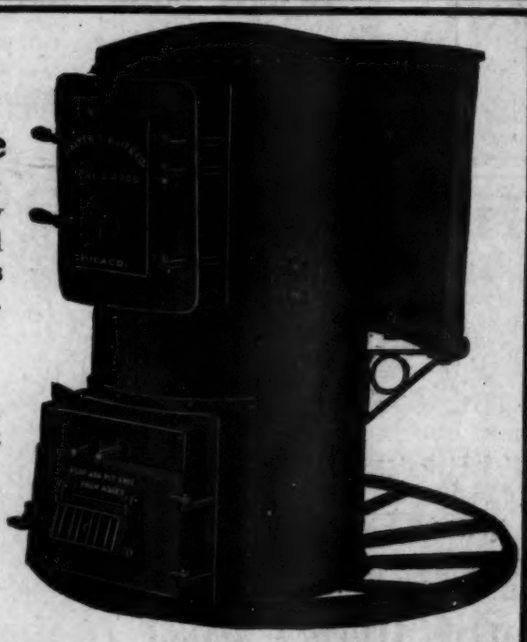
This is a mighty good furnace and one **your customers** would appreciate.

It Is A Great FUEL Saver

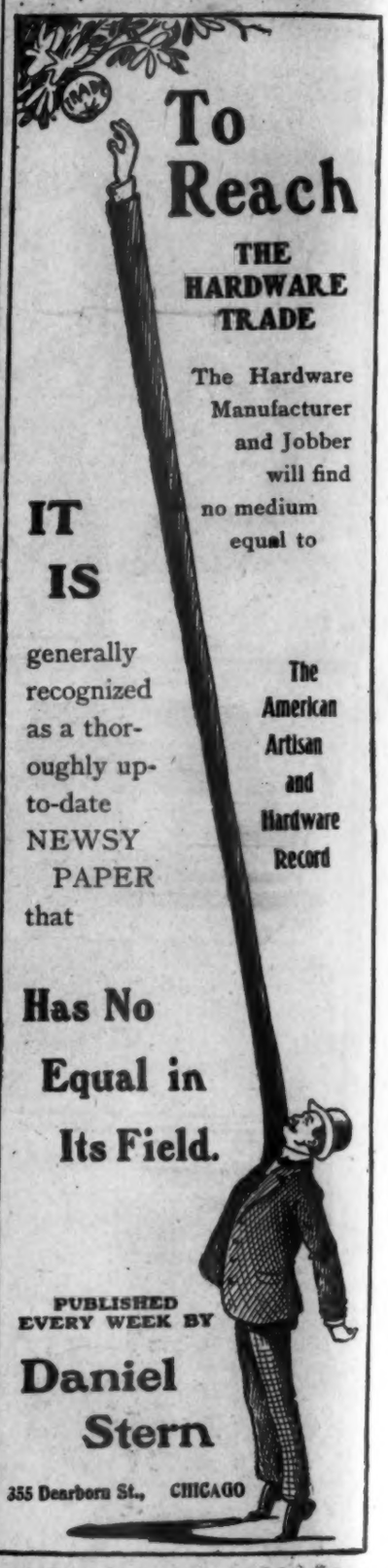
Absolutely Gas, Smoke and Dust Proof.

Unusually Powerful and has quick Heating Capacity.

Write for further particulars to-day.



WALTER S. RAIT & CO., 211-213 Lake St., Chicago, Ill.



To Reach THE HARDWARE TRADE

The Hardware Manufacturer and Jobber will find no medium equal to

IT IS

generally recognized as a thoroughly up-to-date NEWSY PAPER that

The American Artisan and Hardware Record

Has No Equal in Its Field.

PUBLISHED EVERY WEEK BY

Daniel Stern

355 Dearborn St., CHICAGO

THE

MONITOR RADIATOR

This Stove Will Outlast Them All

Its principle of construction is different and far superior.

BASE BURNER WITH
Five Front Flues

WE GUARANTEE

1683

square inches more radiating surface than any other stove.

Points for Consideration:

1—Front part of stove always the hottest.
2—A feature not to be found in any other make.
3—Heat is radiated into center of the room direct.
4—No other stove does this.
5—Fire passes down the five front flues, then under stove and up the back flue to chimney.
6—No stove ever made but the **MONITOR** did this.
7—This stove gives all the additional heat furnished by the 1683 square inches of radiating surface with the same amount of fuel other makes consume in giving less heat.
8—The **MONITOR RADIATOR** has hot air flues of 946 square inches capacity which can be conducted to heat rooms above or utilized in heating the rooms on lower floor.
9—It is handsome in appearance—a stove to be proud of.
10—BEST HEATER EVER PRODUCED.

MANUFACTURED BY

The Monitor Stove & Range Co.

CINCINNATI, O.

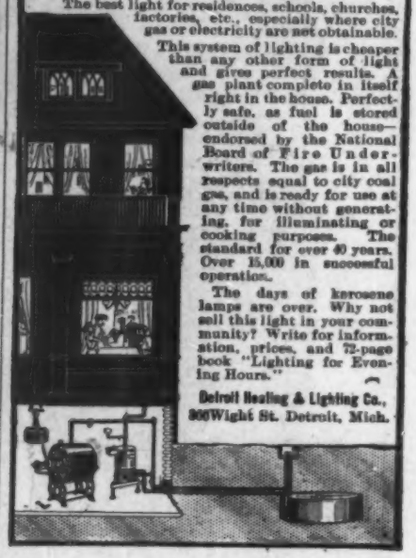
Distributors:
For the State of Michigan, MORLEY BROS., Saginaw, Mich.
For the State of Minnesota and Northwest, THE GREAT WESTERN STOVE AND REPAIR CO., Minneapolis, Minn.
For the State of Wisconsin, MORLEY MURPHY HARDWARE CO., Green Bay, Wisconsin.
For the State of Nebraska, Wyoming, Western Iowa and the Black Hills, PAXTON & GALLAGHER CO., Omaha, Nebraska.

Perfect Light for the Country Home

DETROIT Combination Gas Machine

Here is a lighting system that not only means good profits for you but it will give the most satisfactory service to your customers.

The best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable.



This system of lighting is cheaper than any other form of light and gives perfect results. A gas plant complete in itself right in the house. Perfectly safe, as fuel is stored outside of the house—endorsed by the National Board of Fire Underwriters. The gas is in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. The standard for over 40 years. Over 15,000 in successful operation.

The days of kerosene lamps are over. Why not sell this light in your community? Write for information, prices, and 72-page book "Lighting for Evening Hours."

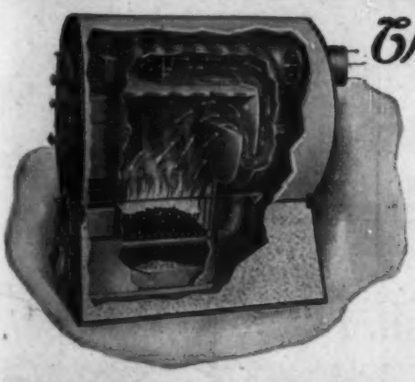
Detroit Heating & Lighting Co., 306 Wight St. Detroit, Mich.

The New CELLULAR OVERDRAFT FIRE POT

HAVE YOUR **FURNACES** GOT IT?

Better write us.

THE BONNOT COMPANY
CANTON, OHIO



The MAJESTIC WARM AIR HEATING SYSTEM

An Original and New Idea for Generating Warm Air

We illustrate here a sectional side view of No. 25 Series, burning coal, showing travel of smoke and hot gas through the radiator flues, which course it is compelled to take before allowed to pass to the smoke pipe, and by so doing comes in direct contact with the heavy corrugated surface of the combustion chamber.

Note the ease with which radiator flues can be cleaned. All the soot dropping to cast elbow in rear, where it passes into ash pit.

The MAJESTIC looks mighty good and is just as good as it looks. It is low down in height (52 in.) and low down in price. Sure to sell wherever introduced. Write for Catalog today.

MAJESTIC FURNACE & FOUNDRY CO., Huntington, Ind.

Boynton's Square-Pot Crusader Furnace

IF YOU WANT A FURNACE

that will stand by your customer in the coldest winter weather, without constant attention, and will not eat up what ought to be a season's supply of fuel in two or three months, examine into the merits of the

BOYNTON SQUARE-POT FURNACES

You should have our Catalogue on file. A postal card brings it

Boynton Furnace Co.

147-149 Lake Street, Chicago **106 West 37th Street, New York**
230 Pacific Avenue, Jersey City

You Can See The Point

Study this illustration and you will want to know **more** about it.

Our catalogue explains fully and is at your service.

of our unequaled construction of **Fire Pot** and **separate air heating** flues by examining this cut. You are looking **upward** through the **bottom** of the fire pot of our

FAULTLESS SCIENTIFIC HEATER

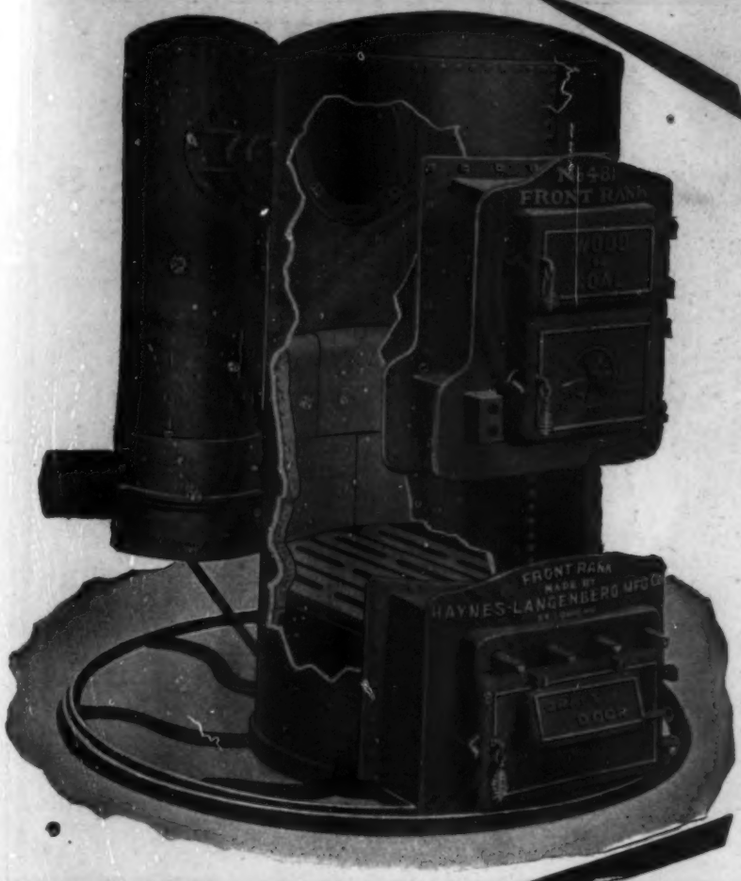
Note the following:

Extra heavy sectional pot. Size at **bottom same** as at **top.** Therefore extra large grate surface.

Direct fire pot radiation into each flue. All flues (or tubes) overhang the fire. Fire passes entirely around each flue.

THE GRAFF FURNACE CO.

208 Water St., NEW YORK



The

Front Rank Steel Furnace

The result of **Twenty Years** of manufacturing experience and the most sensible and practical, durable and safe furnace on the market.

A heater with as many selling points of genuine merit has never been made.

1.—**Absolutely Gas Tight.**
2.—**Radiators Cannot Choke Up.**
3.—**Burns Any Kind of Fuel.**
4.—**Greatest Fuel Saver Ever Made.**
5.—**No Direct Draft**
6.—**Perfect Combustion Certain.**
7.—**12,000 Used in St. Louis Alone.**
8.—**Riveted Like a Boiler.**
9.—**Built on Straight Lines.**
10.—**Heats the House from Cellar to Garret.**

We can offer live dealers a mighty good Agency proposition. Our Catalog can be had for the asking.

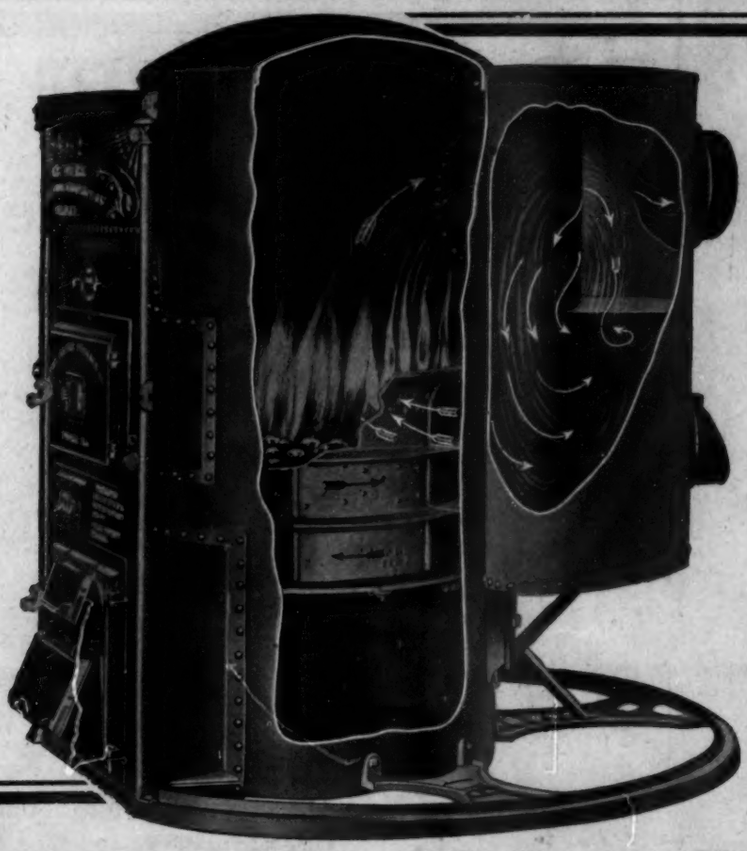
Haynes-Langenberg Mfg. Co.
4045-4057 Forest Park Boulevard
ST. LOUIS, MO.

Monarch
AIR-BLAST
Furnace

¶ The most practical SOFT COAL FURNACE known to the trade. The AIR-BLAST is in the form of a sectional perforated upper fire pot, through which heated air is fed upon the fire surface, completing and PERFECTING COMBUSTION.

Write for our Complete Catalog

Forest City Foundry & Mfg. Company
CLEVELAND, OHIO



Weir

All Steel

Furnaces

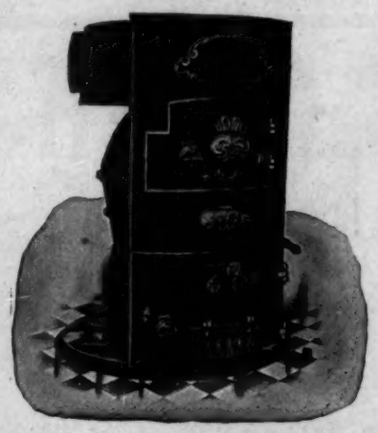
have been more widely imitated than all other furnaces on the market—sure evidence of their superiority.

The **WEIR** was the first all-steel furnace on the market and has a record of **30 Years** of success back of it.

It absolutely consumes all the gases and soot and while widely imitated has never been, nor will it ever be equaled.

Write for our handsome catalog.

THE MEYER FURNACE CO., Peoria, Ill.



OUR NEW

De Haven All Cast Furnace

STRICTLY MODERN AND UP-TO-DATE IN EVERY RESPECT

All the latest features in modern furnace construction are embodied in the make-up of this furnace. Features:

Extra Heavy; Gas Tight; Burns all Grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Rolling Bar Grate.

WRITE TODAY FOR CATALOG AND PRICES

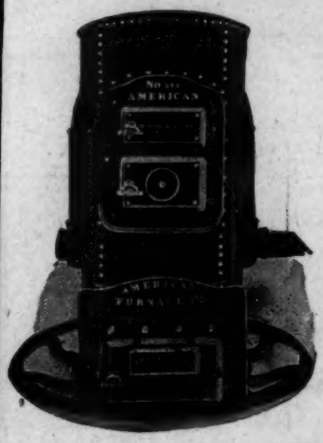
Youngstown Furnace & Supply Company

Manufacturers of the Celebrated **LION-APEX** and **BESSEMER** Series of Furnaces

Niles, Ohio

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributers



Both the Dealer's and the User's Interests

Have been considered in the construction of

American Furnaces

We have made a furnace that every dealer in every community can sell and guarantee. A furnace that is built upon Hygienic and Modern Principles and bound to satisfy the user in every particular.

Clean and Tight Like a Boiler

—our new method of riveting makes it so.

DEALERS: A Sample Furnace will be shipped to any responsible dealer in the United States and if after careful examination (we allow you 30 days) it does not prove entirely satisfactory, it can be returned at our expense.

WRITE FOR OUR CATALOG TODAY.

The American Furnace Co., 1911-15 Pine Street St. Louis, Mo.

You Don't Have To Worry

about the satisfactory working of your heating jobs if you have installed a MUELLER furnace.

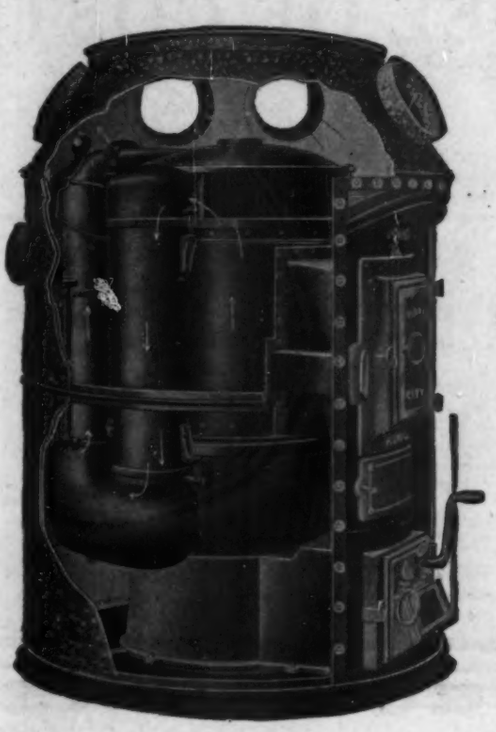
They are very economical in fuel consumption—and they last a life time.

MUELLER furnaces are not competition goods—they are in a class of their own—above all others.

Our catalog will tell you all about MUELLER furnaces. We'll send it to you—what is your address?

L. J. MUELLER FURNACE COMPANY

Established 1857 — 191 Reed St., MILWAUKEE, WIS.



One of the many styles in which

Floral City Furnaces

are made

Write for our new Catalog just out. We can interest you.

Monroe Foundry & Furnace Co.
Monroe, Mich.

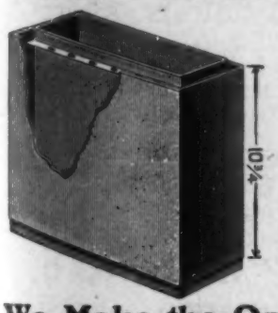
It Will Pay You

to illustrate your advertisements in your local papers. A sheet of comic advertising cuts sent on application

These cuts are furnished with catchlines showing their application to the hardware, stove and tinners' trades.

Address

DANIEL STERN
355 Dearborn St., - CHICAGO



The MICHIGAN SAFETY FURNACE PIPE COMPANY

Corner Brooklyn and Abbott Streets,
DETROIT, MICHIGAN

Manufacturers of A PERFECT HOT AIR FURNACE PIPE, SAFETY WALL PIPE, SINGLE PIPE and FITTINGS in both Tin and Galvanized Iron.

WRITE FOR OUR LATEST CATALOG.

We Make the Only Sectional Furnace Pipe in which the Inner Walls Form the Cross Walls.

No Wings to Pull Out. — No Cleats to Bend.

"GILT-EDGE" FURNACE SALES MEAN "GILT-EDGE" SATISFACTION

For The **Dealer** and His **Customers**

"GILT-EDGE" Insures the Greatest Economy, Durability and Power
Our Publicity Department will co-operate with you.
Write for selling plans, catalogues, etc.

R. J. SCHWAB & SONS COMPANY

Manufacturers
Park, Clinton and Reed Streets, MILWAUKEE, WIS.

A FURNACE—FREE OF COST

¶ Your customer will be interested if you promise to return to him each year a part of the purchase price of his furnace until all has been returned. In this way he will secure his furnace free of cost.

¶ This is exactly what you can do by offering him

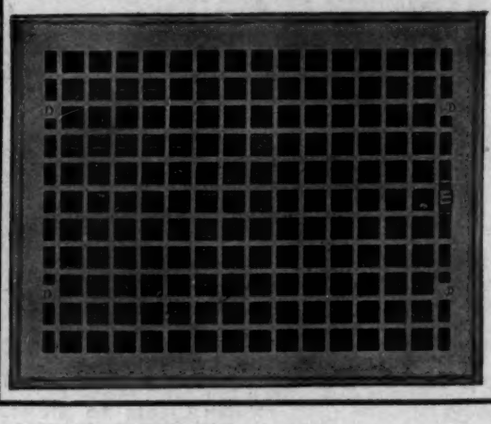
Green's Colonial Furnace

¶ With the average furnace the smoke passes up the chimney and is lost. The bowl in Green's Colonial Furnace is provided with slots, through which the air enters the fire, the oxygen in the air creates combustion, the smoke is burned, and your customer will need just that much less fuel. One-third of soft coal is smoke. If this one-third is burned, it will require just that much less fuel. This one-third will be money in your customer's pocket each year and in a few years the furnace will have cost him nothing.

¶ Write for catalogue giving full description of this and other furnaces. Do this to-day.

Green Foundry & Furnace Works
DES MOINES, IOWA
Lincoln Stove Repair Co., State Managers, Lincoln, Neb.
Rowe Construction & Heating Co., State Managers, Watertown, S. D.

ALL STEEL REGISTERS



AS SPECIFIED BY U. S. GOVERNMENT

¶ This is the register that fulfills all requirements of the United States Government, as called for on specifications for all wrought steel goods.

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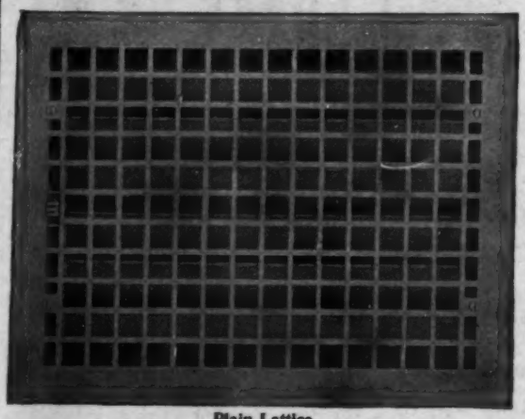

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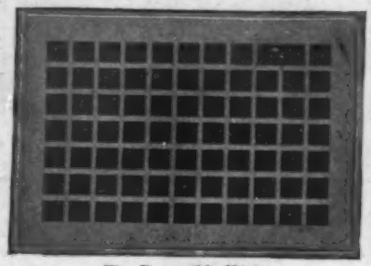

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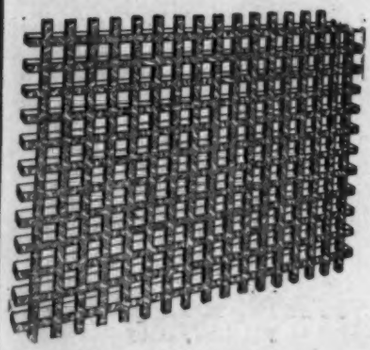

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Rochester, N. Y., U. S. A.

ESTABLISHED 1880.

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PUBLISHED EVERY SATURDAY.

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CHICAGO, JUNE 26, 1909.

AMONG the peculiar facts concerning the growth of the United States from 1858 to 1908, noted in the annual report of the New York Chamber of Commerce, the following increases are observed: Population, 193 per cent; the wealth of the country, 563 per cent; public debt, 2,375 per cent; the per capita debt from $1.51 to $10.76; bank deposits, 3,460 per cent; receipts of the government, 1,186 per cent; war expenditures, 329 per cent; navy expenditures, 745 per cent; imports per capita from $8.35 to $13.70; exports per capita from $9.14 to $21.04, and the consumption of wines and liquors, 266 per cent, or from 6.42 to 23.25 per capita gallon.

Our Enormous Fire Losses.

FEDERAL experts who are making a study of building materials that will withstand fire and who are therefore taking a keen interest in the fire losses as they are reported for the entire country, declare that in spite of all efforts toward better building conditions the death and destruction due to fires and conflagrations in 1909 will eclipse all previous records, with the exception of the years in which the Baltimore and San Francisco fires occurred. They point to the fact that in sixteen days of April five big fires in different parts of the United States resulted in a loss of about $7,000,000, the death of twenty-two persons, the injury of seventeen, and the rendering homeless of more than 3,000.

"The people of the United States have not yet learned the lesson of the Baltimore and San Francisco fires," says Richard L. Humphrey, engineer in charge of the structural material laboratories of the United States Geological Survey. "Fort Worth's recent experience, when more than 300 homes were destroyed by the flames, is but a repetition of what has happened in the past and what will occur in the future until American municipalities wake to the situation and enact legislation which will absolutely prevent the further construction of buildings that are not fireproof. It seems difficult to make the people believe that in 1907 fires in the United States cost more than a million and a quarter dollars for every day in the year, an annual tax of more than $5 for every man, woman and child in the country. We are spending a billion dollars a year on new buildings and construction work, while our fires cost half a billion dollars.

"No other nation has such an unenviable record as this. Our fires are costing from six to eight times as much per capita as any country in Europe. By the total cost of fires I refer not only to the actual destruction of property, which amounted to $215,000,000, but also to the cost of maintenance of fire departments and the amount of insurance paid over and above the money returned to reimburse owners of buildings. While we are wasting several times as much property per capita as Europe, we are also destroying in these fires five times as many lives as are lost in the other countries. In 1906, according to the United States Census, 6,000 persons died of burns and perhaps 10,000 were seriously injured."

The federal government is directly interested in this question because it is the owner of buildings valued at more than half a billion dollars which are not insured, and is spending more than $20,000,000 each year for new structures. This building and construction work is all intended to be of permanent nature. It involves interests of such magnitude that the government can afford to take no risks concerning either the methods of construction or the materials to be used.

The Geological Survey some time ago completed a series of preliminary fire tests of building materials which will soon be printed by the government in the form of a bulletin. The building materials were placed in a furnace where gas flames were formed by a blast of air against one side of the material. After two hours in which the material was heated to the point expected in a conflagration, the material was taken from the furnace and the water turned on from a hose to get the conditions which obtain after the firemen begin their work. The conditions under which these tests were made were unusually severe, and as none of the materials passed perfectly, it proved a good test for comparative purposes. The tests are not, however, conclusive, being the first of an extended series of investigations.

Never before has a better opportunity presented itself than the present for sheet metal manufacturers and sheet metal workers to start an aggressive campaign in favor of sheet metal for building purposes. The United States government is giving more attention to this important subject than it has heretofore done, and to all intents and purposes the interest so far manifested by it is but embryonic. Furthermore, architects and contractors everywhere in the country are awakening to a realization of the indispensability of sheet metal roofs, window frames, etc., as proof against fire in building construction, and with the full co-operation of master sheet metal workers the campaign of education along these lines should result in the enacting of municipal, state and federal legislation compelling the use of sheet metal in the building industry where it is best calculated to reduce fire hazards

to a minimum. Co-operation by all concerned, and plenty of it, is the one thing that will bring about this result.

Manufactures of the United States.

LESS than one-tenth of the manufactures of the United States are exported, while those imported equal in stated value about one-twentieth that of the home product. This statement is the result of a comparison of the figures of production, exportation, and importation of manufactures in the United States presented by the Statistical Abstract of the United States, issued by the Bureau of Statistics of the Department of Commerce and Labor.

The census of 1905 shows the gross value of the factory product of manufactures in 1904 at 14,802 million dollars, and estimates the value of all other manufactures, mechanical and neighborhood, at about 2 billions, making the gross value of all manufactures produced in the United States in 1904, 16,867 million dollars. This gross valuation, however, includes many duplications, because the products reported by one manufacturer often become the manufacturing material of another, who also includes their cost in the report of the value of the products of his factory. By deducting from the gross valuation the value of this manufacturing material used in a partly manufactured form, the Census Office states the net or true value of the manufactures of the country in the census year. The process reduces the valuation of the factory product of 1904 from the gross figure of 14,802 millions, to a net valuation of 9,821 millions; and an application of the same method of reduction to the non-factory manufactures, would place the net value of all manufactures in 1904 at 10,892 million dollars. The census of 1900, which reported the gross value of all manufactures in 1899 at 13,014 million dollars, places the net value for that year at 8,371 millions.

The Bureau of Statistics' figures show that the exportation in the year ended June 30, 1905, of all articles classed by the census as manufactures amounted in value to 895 million dollars, a sum which equals 8.2 per cent of the 10,892 millions estimated as the net value of all manufactures in 1904. The imports in the year ended June 30, 1905, of all articles similar to those classed by the census as manufactures were valued at 576 million dollars, which equals 5.3 per cent of the net value of the domestic manufactures of 1904.

Even these figures, which show that the valuation of manufactures exported equals 8.2 per cent of the valuation of manufactures produced, and that the valuation of the manufactures imported equals 5.3 per cent of the valuation of the manufactures produced, are, however, only approximate, in an attempt to determine the true relation of imports or exports of manufactures to the home production. The valuation of manufactures, supplied to the Census Office by the various manufacturers, states the value of the product at the place of production; while the Bureau of Statistics figures of exportations state the wholesale market value of the article at the port from which exported. Thus the stated values of the articles exported are doubtless in most cases higher than the stated values of the same articles at the place of production, since the cost of transportation and dealers' profits are presumably added in the valuations at which the domestic merchandise in question is wholesaled at the various ports whose current prices determine the valuation placed upon the articles when exported. On the other hand, the values of the imported articles quoted by the Bureau of Statistics are by law "the actual market values or wholesale prices of such merchandise in the principal markets of the country whence imported," and if freights and profits are added to this figure the valuation at the point where it actually enters the United States would be somewhat in excess of that quoted. Thus the values of manufactures produced are those of the place of production, the figures of exports are those of the wholesale markets of the port from which exported, and those of importation are those of the wholesale market of the country whence imported. Could production, exports, and imports be brought to a common basis of valuation, the percentage which exports bear to the total production would be slightly reduced and that which imports bear to the total production be slightly increased; and the percentages which exports and imports, respectively, bear to the total production would become even more nearly identical than those above quoted, of 8.2 per cent on the export side and 5.3 per cent on the import side.

Permanent Traffic Bureau Planned.

THE establishment of a permanent traffic bureau representing all sections of the United States, and directed by a man of wide practical experience, is being considered by the National Association of Manufacturers to represent that organization in co-operating with other commercial bodies in solving the problems that confront the carrier and the shipper. This action was strongly urged by the freight committee appointed last year, when the proposed 10 per cent increase in rates was agitating shippers. It is suggested that such a bureau might have performed valuable service in securing a more general adoption of the uniform bill of lading, thereby avoiding the confusion resulting from its non-adoption in southern territory. Such services might also aid in securing legislation giving the Interstate Commerce Commission the right to suspend a freight rate advance pending inquiry.

Among the other important questions which it is suggested the bureau might solve are: More simplicity in tariff construction; uniformity in state and national laws governing the regulation of carriers; carload ratings; prompt settlement of claims; uniform classification; laws giving the shipper the right to control the routing of freight and to make carriers responsible for erroneous rate quotations.

Many and various are the problems affecting the carrier and the shipper, and it is not to be wondered at that there is more or less friction going on all the time. Some of these problems are not difficult of solution while others are extremely perplexing. There can be no doubt that the establishing of such a bureau as is planned by the National Association of Manufacturers is a desideratum of no small consequence. It is imperative, however, that it be properly administered. Shippers are sometimes prone to adopt the

wrong course of procedure in contesting a point against a carrier, and in this connection much good might be accomplished by a permanent traffic bureau in pointing the right way to a solution of a problem where the success of the case from the viewpoint of the shipper depends on action both definite and positive.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

Philip Corbin of New Britain, Conn., president of the American Hardware Corporation, and looked on as Connecticut's richest citizen, recently returned from the State Prison in Wethersfield, Conn., where he visited his old chum, Charles Gilbert, a convict, sentenced in 1864 for murder. Mr. Corbin makes such trips twice a year. Years ago, when both men were young, with their way to make in the world, they were members of the New Britain cricket team. Corbin was the star bowler and Gilbert was a terror at the bat. They were big factors in making New Britain win a great majority of its games. One day Gilbert, in a fit of rage, shot and killed Henry Caldwell. Corbin stood by his friend through the trial, but the evidence was conclusive and Gilbert was regarded as lucky to escape the gallows. "You are guilty," said Corbin, "and you deserve your punishment, but I shall still be your friend, and twice every year I'll come to see you." For forty-five years Mr. Corbin has been as good as his word. Every six months he journeys to Wethersfield and sits for an hour at one end of a long table, Gilbert sits at the other and an armed guard looks on. The millionaire is said to have taken good care of Mr. Gilbert's family and sees that the convict lacks none of the little comforts the prison regulations allow. "These visits are the only bright spots in my life," Gilbert has said often, with tears in his eyes. "Always keep your temper, Phil; always keep your temper. Remember me." Though Mr. Corbin possesses powerful political influence he declines to make any effort to obtain Gilbert's pardon. "He is guilty," says the hardware man. "He knows he deserves his punishment. I do not think he himself would wish me to go against my conscience in endeavoring to procure his release." Was there ever a better and more typical example of genuine altruism than this? I trow not. In the galaxy of men supremely great there ought to be an honored place for Mr. Corbin, for he has demonstrated that he is worthy of it. I venture to say that the acts of kindness bestowed by him on his unfortunate friend, Gilbert, have had a tendency to prolong the latter's life while in penal servitude. If not, they certainly have brightened it a whole lot. How many men of wealth are to-day doing acts like this? Few, very few. "Alas for the rarity of Christian charity under the sun!"

* * *

Any pessimist who complains that there is no profit, but rather only grinding toil in farming, is invited to look over the books of Francis Sestier of Des Moines, Iowa. This young man has made $18,000 worth of permanent improvements on a 32-acre farm in the last seven years and paid for it all with the product of the soil. Sestier in 1875 went to Des Moines to work on the construction of the State Capitol, his father having been a stonecutter. But stonecutting is unhealthy business, and one day the elder Sestier determined to quit it. He bought a farm within sight of the golden dome of the state house he had helped construct and struggled along for years, paying off the mortgages and at the same time raised a family. Seven years ago he died and his son Francis took the active management. The young man turned his farm into a truck garden, which is now said to be the finest west of the Mississippi River. During all these years his fertilizer has not cost him more than 50 cents an acre a year. Among the permanent improvements built since 1901 and paid for are an $8,000 house, under which is a modern cold storage plant, a steam pumping plant that draws water from the river half a mile away and lifts it 145 feet into a monster reservoir, and eight greenhouses. Mr. Sestier by his management is making his farm yield a gross income of $300 or $400 an acre. Like every successful man, Mr. Sestier can handle some things better than others. Tomatoes seem to be his favorite crop. He introduced the method of raising tomatoes on poles and plants 3,000 vines to the acre, getting a yield of 750 bushels of fruit that brings the highest price on the market. He makes $2,500 on lettuce in a year. The young man's success is considered the more remarkable because he never attended an agricultural college or took a course in farming.

* * *

The inventor of the roller skate, which is now much in vogue, was a Dutchman named Merlin, who went to England in 1760. Eight years later he exhibited a "pair of skates contrived to run on wheels" at a museum, and also gave public exhibitions of his prowess in skating over a smooth floor, playing a violin the while. It appears, however, that his demonstrations were on occasions rather more exciting than successful, for it is recorded that he used to fall about and smash into mirrors and pictures which covered the walls of the room.

* * *

This little "near" sonnet is dedicated by the *Boston Herald* to the "Janitor." Why, however, furnace men should be accused of being partial to books like Elinor Glyn's "Three Weeks," is something that I cannot quite understand. The fact that a furnace man's job is sometimes not the coldest in the world should not create in him a desire to warm up by poring over fair Elinor's spicy productions. I am sorry that my conscience will not allow me to give this poem a place in my "Peerless Collection."

HIS ANSWER.

Quoth the raven at his door:
"Have you read fair Elinor?
  Have you read her spicy books,
  Sought by furnace men and cooks,
  Recommended by the rooks?"
And he answered: "Once before,"
To the raven at his door;
"Once before, but nevermore.
  If my library is chill
  I will run the furnace till
  It is hot enough to kill;
But to read fair Elinor,
As I did in days of yore,
Nay, nay, raven, nevermore."

News Siftings

The regular quarterly meeting of the Central Association of Stove Manufacturers was held at the Chittenden Hotel, Columbus, Ohio, on June 16.

The Scott Stove & Furnace Company, Cambridge City, Ind., elected the following officers at their recent annual meeting: President, F. W. Marson; vice-president, Claude Kitterman; secretary, C. H. Graver; treasurer and manager, B. F. Wissler; directors, B. F. Wissler, F. W. Marson, C. H. Graver, Claude Kitterman and R. L. Smith.

The Mt. Penn Stove Works, Reading, Pa., and 111-113 North Second St., Philadelphia, Pa., state that their "Penn Fairy" is a very efficient base-burner or straight draft parlor stove. It is made in two sizes, either single or double heater. The company's catalogue gives full particulars regarding this and other stoves of the "Penn" line. When writing, kindly mention THE AMERICAN ARTISAN.

James H. Gallagher, who for the past 23 years has been connected with the Portland Stove Foundry Co., Portland, Maine, recently resigned his position to enjoy a long rest after his many years of active service with the company. As a token of the esteem in which he was held by his business associates, he was presented with a very handsome silver mounted water pitcher and a meerschaum pipe.

The Union Stove Works, New York City, have recently issued a 16-page catalogue, in which are illustrated and described their complete line of "Astor" Gas Ranges and Appliances. An important feature of the "Astor" line of gas ranges is the side broiler extension with reversible burner, used with flames pointing downward for broiling, and reversed, with flames upward for heating cake-griddle or for boiling. The catalogue is gotten up in very attractive form.

The Co-operative Foundry Co., Rochester, N. Y., and 264 S. Clinton street, Chicago, have recently added two new ranges to their well-known "Red Cross" line—the "Red Cross Charm" and the "Red Cross Banner." Both are provided with loose hearths, the latter having a drop oven door. These two new ranges have been put on the market as a result of the popularity that has attended the introduction of the company's "Red Cross Prize" range. They are all manufactured with 18-inch oven and with six 8-inch covers.

The Peninsular Stove Co., Detroit, Mich., are distributing a folder illustrating and describing in detail the "Diamond Peninsular" Steel Oven Cook Stove, which they have placed on the market. The oven of this stove is made entirely of steel. The main top is made in sections fitted closely together in a manner to overcome warping, while the fire-box is properly proportioned and of the right capacity to maintain a steady heat. The durable cast iron linings for hard or soft coal are thoroughly ventilated. Large quantities of hot water can be obtained from the enameled reservoir tank, the manufacturers state.

Salesmanship is the fine art of knowing a thing thoroughly and telling it intelligently.

THE "HOWE" VENTILATOR.

The Galusha Stove Co., Rochester, N. Y., have put on the market a new type of stove known as the "Howe" Ventilator. They describe it as "a ventilating stove and the only correct and successful one ever produced." This stove is credited with not only heating and circulating pure air in all parts of the room at the same time but supplying even unvarying ventilation at all times. It supplies fresh air from the outside, to be heated, while a corresponding volume of vitiated air is removed from below and discharged well into the smoke flue. The ventilating capacity of the "Howe" is given as 1,600 cubic feet an hour. The manufacturers state that this leaves the space heated constantly supplied with fresh warm air, with the temperature fully equalized—varying scarcely two or three degrees between floor and ceiling. By this simple method, the Galusha Stove Co. assert that the "Howe" heats twice the space warmed by an ordinary stove, without any increase in fuel. They request the trade to write for complete descriptive matter. When doing so, kindly mention THE AMERICAN ARTISAN.

THE "BRILLIANT CINDERELLA" BASE-BURNER.

"Heats like a furnace, wears like honesty, shines like a mirror, saves like a miser"—This is what the Stove & Range Co. of Pittsburgh, Pittsburgh, Pa., say of their "Brilliant Cinderella" Base-Burner, to which they are calling the attention of the trade. This stove has five flues, and the nickel is of the lift-off type. The 15-inch size has 10 square feet of radiation in the back, according to the manufacturers, while the 13 and 14-inch sizes have proportionate amounts. The Stove & Range Co. of Pittsburgh assert that there are 56,000 "Cinderella" base-burners in use. When writing for prices, kindly mention THE AMERICAN ARTISAN.

A FIRE-BACK THAT WILL FIT ANY STOVE.

The Portsmouth Stove & Range Co., Portsmouth, Ohio, manufacturers of the well-known "Model" steel ranges, are now introducing to the trade an entirely new specialty known as the "Equity" Fire-Back, designed to fit any make of stove. The company have been granted a trade-mark patent on the word "Equity," and a patent is pending on the mechanical construction of the fire-back. The "Equity" fire-back is provided with extension plates, which, when bolts on the back side of the fire-back are slackened, may be moved to the length and width desired. On the bolts being tightened the fire-back is ready to be installed in the stove. The "Equity" fire-back can be used at any size between the extremes of 7 by 21 inches. The Portsmouth Stove & Range Co. state that it is "as staple as eight penny nails in a hardware store." It is always in season, and they say that it is convenient and profitable for the jobber, retailer and consumer alike. The "Equity" fire-back is packed half a dozen in a box. When writing The Portsmouth Stove & Range Co., kindly mention THE AMERICAN ARTISAN.

"THE STOVE REPAIRER AND TIN SHOP SUPPLIER."

This is the title of a catalogue, the 17th issue of which H. E. Hessler Co., 502 North Salina street, Syracuse, N. Y., are now distributing to the trade. The main lines which are given attention in this catalogue are, stove repairs, furnace repairs, water fronts, fire clays, asbestos cements, putties and a general line of tinshop supplies. Besides these, there are numerous items of hardware as well as furnaces, stoves and metal ceilings illustrated and described. When writing H. E. Hessler Co. for their attractive catalogue, kindly mention THE AMERICAN ARTISAN.

THE "CHAMPION" INTERCHANGEABLE GAS RANGE.

The Champion Steel Range Co., Cleveland, Ohio, state that their "Champion" Interchangeable Gas Range, here illustrated, does double the work of the

The "Champion" Interchangeable Range.

ordinary gas or coal range. Cooking, baking, broiling or roasting with gas, coal or wood, can be done with this range without removing a burner. It has six 8-inch cooking holes with reducing lids, and two summer grates, the oven measuring 18½x20½x14 inches. The broiler measures 18½x20½x14 inches. The warming closet is of "Champion" style, and the body of the range is of polished steel, full asbestos lined. It is declared to be a range of quality, durability and economy. When writing for catalogue, kindly mention THE AMERICAN ARTISAN.

"FOSTER'S RELIABLE" STEEL RANGE.

The Foster Stove Co., Ironton, Ohio, have placed on the market "Foster's Reliable" steel range on legs, which they state is meeting with great success. A steel range on legs does not burn or rot the covering on the kitchen floor. This range is made of Wellsville polished blue sheet steel with the rivets set closely together, thus insuring a strong and substantial range. It is lined with asbestos millboard, thus retaining the heat and making the body of the range practically indestructible from the action of the heat itself. The nickel trimmings are bright and attractive and help to make this range easy to sell. The top oven plate is protected and braced on the top side and the bottom oven plate on the under side by strong and serviceable cast iron braces, thus keeping the oven true and free from buckling at the top and bottom. By the company's new method the oven door spring can be removed and replaced in a moment by even an inexperienced person, it is so simple. It has a nice large hearth plate that the women find so handy when cooking. The reservoir is made of cast iron with porcelain lining and will heat water quickly. It can also be equipped with water front for pressure boiler when desired. The high closet is made of Wellsville polished blue sheet steel and fitted up with top back guard with nickel-plated cast-iron corners. The closet joint of pipe has a stamped steel nickel-plated draft register that is ornamental and also very useful in helping to control the fire. The Foster Stove Co. state that "Foster's Reliable" range has so many good features that they unhesitatingly recommend it for any kind of use. When writing the company, kindly mention THE AMERICAN ARTISAN.

"HIGH ECONOMY IN FUEL CONSUMPTION."

The above is the title of a very attractive eight-page booklet which the Albany Foundry Company, Albany, N. Y., are distributing to dealers and in which is given a detailed description of the company's well-known "Control" Cook Stove. This stove was constructed for the burning of coke, this fuel being cheaper than coal, and because a fire of it in the "Control" will outlast a fire of coal. Hard coal lasts in this stove as long and will effect almost as much economy as coke, but the cost, about $2.00 per ton more than coke, is against its use. The Albany Foundry Company guarantee that by using coke in the "Control" stove there will be effected a saving of 60 per cent of coal bills, and by the use of coal in this stove a saving of 30 per cent. Illustrations are given in the booklet showing the "Control" with reservoir and mantel shelf, reservoir and tea shelf, square top with tea shelf, and square top alone. The Albany Foundry Company state that the "Control" will hold the fire so that baking and cooking can be done with the fire set the day before; in other words, that the stove will hold the fire for 24 hours without replenishing, if it should be desired to hold it for that length of time. When writing the Albany Foundry Company for booklet, kindly mention THE AMERICAN ARTISAN.

If a man were to quit eating because he wasn't hungry, he would be sent to a lunatic asylum. What about the man who quits advertising because he hasn't enough business?

Don't think the more money you spend the better your displays; 'tis often the case a simple, cheap window properly arranged will sell more goods than an elaborate, expensive window. Use your brain and not any more money than you are compelled to in order to carry out your idea.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 36 to 41 inclusive.

Schedules in bankruptcy of the Roebuck Weather Strip and Wire Screen Co., 207 Broadway, New York, are said to show liabilities of $108,372 and assets of $152,137.

The West Penn Steel Company, Brackenridge, Pa., expect to have their new sheet mill plant ready for operation by October. The steel buildings are almost completed.

Walter A. Williams, a veteran hardware merchant of Hildreth, Neb., died recently after a long illness. He had been engaged in the hardware business for about 20 years.

The William Ashdown Company of Chicago has been incorporated with a capital stock of $2,500 to manufacture and deal in hardware. The incorporators are: John W. Peterman, C. E. Clayton and John F. Peterman.

The Senn Manufacturing Company, Camden, N. J., has been incorporated with a capital stock of $50,000 to manufacture patent steel garden tools. The incorporators are: Edward Senn, Sr., George Senn and Otto Boysen.

The Stichter Hardware Co., Reading, Pa., whose premises a year ago were destroyed by fire, are now located in a new four-story building at 505-509 Penn street, Reading. The building, which measures 57x125 feet, cost in the neighborhood of $75,000.

A. Van Vechten & Son, New York City, has been incorporated with a capital stock of $1,000, to manufacture hardware, etc. The incorporators are: A. Van Vechten and Robert C. Van Vechten, Elizabeth, N. J.; and Frank J. Bloomer, Bath Beach, N. Y.

Mrs. John Matthews, wife of the superintendent of the Du Pont Powder Works at Wilmington, Del., was killed on June 23 in an automobile accident near Amenia, N. Y. The machine upset on a steep hill and threw Mrs. Matthews against a tree, causing almost instantaneous death.

The Columbus Bolt Works, Columbus, Ohio, request dealers to write for their 1909 catalogue "R," illustrating and describing their line of bolts, rivets, nuts, washers, carriage forgings, etc. Prices will be quoted on application. When writing, kindly mention THE AMERICAN ARTISAN.

John Black, a prominent hardware merchant of South Chicago, Ill., died at his home, 7770 Lake avenue, on June 13. He was born in Scotland 64 years ago, and on emigrating to America settled in South Chicago when the steel mills were starting. He is survived by a widow and eight children.

Frank M. Campbell, Philadelphia manager of the Jones & Laughlin Steel Co., Pittsburgh, Pa., committed suicide by shooting himself in the head at Van Wert, Ohio, on June 21. Mr. Campbell was 46 years of age and was the father of three children. It is said that he had suffered from melancholia as a result of the death six years ago of Thomas O. C. Jones of the Jones & Laughlin Steel Co., whose close personal friend he was.

The Saver Mfg. Co., New York City, has been incorporated with a capital stock of $1,000,000, to manufacture washing machines. The incorporators are: Gilbert S. Winant, 1057 Monroe Avenue, Rochester; Joseph N. Patch, 203 Seventh Avenue, Brooklyn; Mayer Rosenholz, Tompkinsville, N. Y.

The Reversible Window Hinge Co., Auburn, N. Y., has been incorporated with a capital stock of $15,000 to manufacture window hinges, etc. The incorporators are: George V. Roberts, Port Byron, N. Y.; Charles E. Tuxhill, James A. Jones, both of Auburn, N. Y., and Charles F. Miller, Syracuse, N. Y.

A petition in bankruptcy is reported to have been filed against the American Steel Spring Co., 2 Rector street, New York City. The company is a New Jersey corporation and was reported to have a plant at Cambridge, N. J. Mason G. Worth, president of the company, was said to be the principal person interested in it.

W. B. Heller & Co., Montpelier, Ohio, request the trade to write them for their booklet giving full particulars of their hardware shelving, shelf boxes, screw cases, etc. The company state that their shelving and fixtures are being used by hardware stores throughout the country with most satisfactory results. When writing, kindly mention THE AMERICAN ARTISAN.

Organized effort to defeat the Parcels Post under the present administration was begun at Washington, D. C., on June 14, when a committee from the National Retail Hardware Association made a plea for the discontinuance of the plan temporarily in operation in some districts. The committee made its plea, first to a number of Senators and then to the President direct.

At the recent annual meeting of the New England Iron & Hardware Association held at Boston, Mass., the following officers were elected for the ensuing year: President, Augustus D. Marble; vice-president, E. A. Loomis; treasurer, Charles H. Breck; clerk, George J. Mulhall; directors, C. W. Henderson, W. H. Dunning, R. G. Boutwell, Charles A. Adams, W. B. Willcox, George H. Gray, Frank M. Marvin, F. L. Greeley and C. F. Bragg.

The annual meeting of the stockholders of the Gray & Dudley Hardware Co., Nashville, Tenn., was held on June 15. The old board of directors was re-elected as were also the officers of the company. The latter are as follows: President, R. M. Dudley; first vice-president, J. M. Gray, Jr.; second vice-president, W. C. Pollard; secretary, R. H. Dudley, Jr.; treasurer, J. T. Jenkins; assistant treasurer, H. T. Hill. The company reports having had a very satisfactory year.

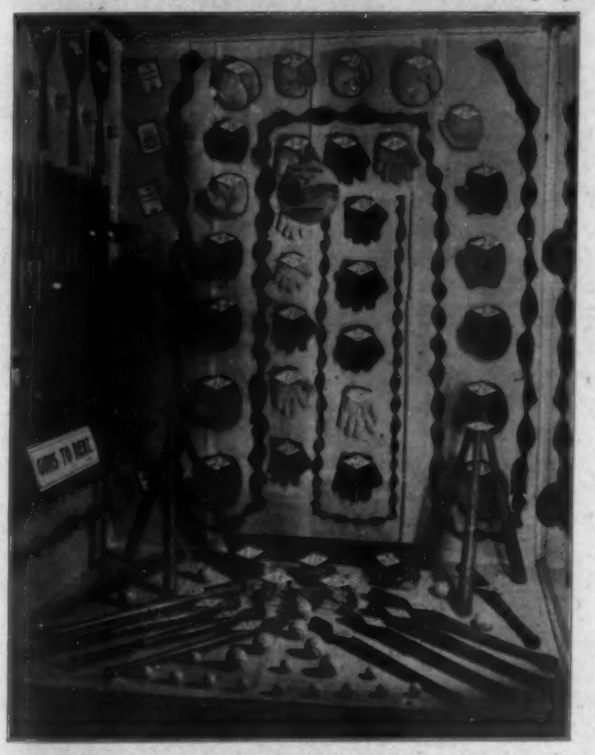
A petition in bankruptcy is reported to have been filed against Wm. Porter Sons Company, manufacturers of lamps and lanterns, 29 Vandewater St., New York City. The business is an old one, having been started 66 years ago by Wm. Porter and was incorporated in December, 1898, with a capital stock of $100,000. On September 10, 1902, a petition in bank-

ruptcy was filed against the company, which was dismissed in November of that year, as creditors had been paid in full. Since then the company has been reorganized and a number of changes have been made in the officers.

The Paddock Hardware Co., 427 E. Forty-seventh street, Chicago, will soon move into their new store at Forty-seventh street and Langley avenue, which will provide for them almost 4,000 square feet additional floor space. It will be the largest hardware supply house on the south side of the city outside the business center. At the rear of the building on the Langley avenue side the company have a vacant space 65 x 67 feet upon which they will build a warehouse and stable for the horses and wagons which they use in their business. The Paddock Hardware Co. was organized in 1903 and the business was started in a small store 18 x 60 feet. In 1905 the stock was moved into the present much larger quarters. The next move will be into a store almost eight times larger than the one now occupied. The building will have an elevator and will be equipped with modern conveniences. The company propose to handle everything in the hardware and house-furnishing line from the smallest nail to a threshing machine.

A WINDOW DISPLAY OF SPORTING GOODS.

A window display of sporting goods that was very favorably commented on by the judges in THE AMERICAN ARTISAN'S recent hardware window display



Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition—Submitted by Arthur Hoffman, with P. Hoffman, 305 Ohio Street, Sedalia, Mo.

competition was submitted by Arthur Hoffman, with P. Hoffman, Sedalia, Mo. Mr. Hoffman's description of the window was as follows:

"The background, side wall and floor of this window were first covered with white crepe paper. The background was used to display a number of baseball gloves and mitts, and a number of sporting goods catalogues. Narrow strips of bright red crepe paper, twisted, also helped to make the background attractive.

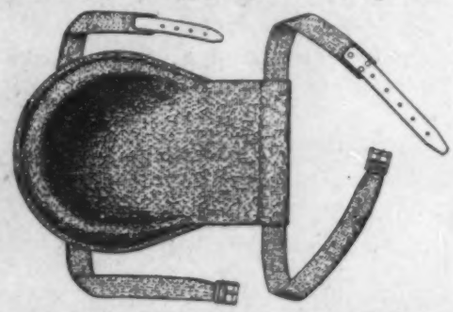
"Along the side wall were displayed a stationary gun rack, filled with various kinds of shotguns, and two leather gun cases, also a number of tennis rackets and balls.

"The floor of the window was used to display baseball bats, base and golf balls, and ball masks.

"The window proved to be a good business getter, and it attracted much attention."

A NEWLY PATENTED NON-SLIPPING SADDLE FOR ROOFING WORK.

A United States patent on an anti-slipping device for roofing work was on June 15 granted to Millard F. Stowe of the Coldwater Specialty Mfg. Co., 134 Lake Street, Chicago, the application for the patent having



Anti-Slipping Device for Roofing Work.

been filed on September 12, 1906. As illustrated the device comprises a base or body of leather adapted to serve as a seat for the operator while at work on a roof. There is a cover of canvas for the upper side of the device, the cover being extended at the upper end to form a suspending extension or flap. A crescent-shaped pad is provided for the lower part of the body. There is a body strap secured to the suspending flap and there are a number of brads on the base. The non-slipping roofing saddle is so arranged that the operator may shift it from one hip to the other without adjusting, thus affording a safe and comfortable seat and precluding the possibility of the worker's clothing becoming torn or badly worn.

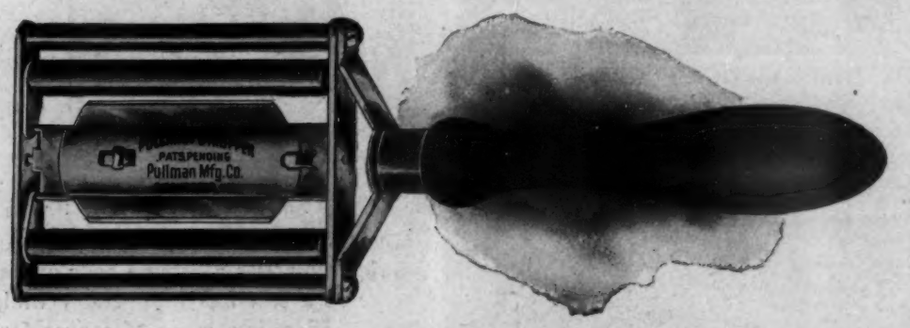
PRODUCTS OF THE MILLER LOCK COMPANY.

The Miller Lock Company, Department "E," Philadelphia, Pa., are distributing a very handsome and elaborate catalogue and price-list illustrating and describing the very extensive line of locks manufactured by them. A feature of the catalogue is the representation of ten patent standard lithographic padlock card assortments consisting of one dozen locks each, mounted on heavy cardboard, the keys being arranged so that they can be unhooked and used to remove or to replace the locks. Each lock covers its own picture. The picture identifies the lock and ornaments the card after the lock has been removed. Each card has an eyelet by which it may be hung up, and also an easel by which it may stand upon a table. The growth of the market for Miller padlocks, etc., is indicated, the Miller Lock Company say, by the development of the fa-

cilities for their manufacture. In the year 1888 the company's premises were not one-fifth as large as they are at the present time. Excellence in design, finish and quality of their products is given as the reason for the phenomenal growth of their business. The Miller Lock Company state that their trade-mark appearing upon their locks stands for every element of merit which it is possible to maintain in hardware of this class. The goods listed in the catalogue include night-latches and dead-locks, locker locks, drawer and chest locks, and a most complete line of padlocks. When writing the Miller Lock Company, kindly mention THE AMERICAN ARTISAN.

THE "PULLMAN" AUTOMATIC SAFETY RAZOR BLADE STROPPER.

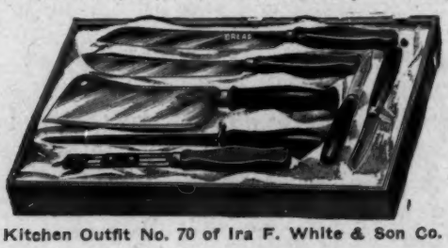
The accompanying illustration shows the "Pullman" Automatic Safety Razor Blade Stropper, which has been put on the market by the Pullman Mfg. Company, Rochester, N. Y. The company state that this stropper can be purchased with a guarantee that it will handle the blade of any recognized safety razor on the market, either single or double edge, and that it will positively not cut the strop. Both edges of any double edge blade may be sharpened without removing the blade from the stropper. It can be used on any kind of a strop, and regardless of the pressure on the strop there is always a flat surface under the blade. Therefore, the bevel or angle is always the same. The stropper will be manufactured in five different styles.



"Pullman" Automatic Safety Razor Stropper.

A NEW KITCHEN OUTFIT.

The accompanying illustration shows a Kitchen Outfit, No. 70, which has been put on the market by Ira F. White & Son Co., Newark, N. J. It is put up in a substantial case and presents a very attractive appearance. Special sets may be made to order. Ira F. White & Son Co., also manufacture a large line of shoe and putty knives, wall scrapers, etc. Their line of can openers and cap lifters is well known to the trade. When writing for prices, kindly mention THE AMERICAN ARTISAN.



Kitchen Outfit No. 70 of Ira F. White & Son Co.

THE WHITE LILY MFG. CO. REORGANIZED.

A reorganization of the White Lily Mfg. Co., Davenport, Iowa, manufacturers of washing machines and gasolene engines, has been effected by the purchase of the interests of B. L. Schmidt and F. L. Schmidt by Sam T. White, and by the infusion of new blood and new capital into this well-known company. The new officers of the White Lily Mfg. Co. are as follows:

President—Sam T. White.
Vice-President—Wilson McClelland.
Secretary—Howard W. Power.
Treasurer—Dick Lane.
Directors—Sam T. White, Wilson McClelland, Howard W. Power, Dick Lane, C. T. Darling, Charles Schuler and W. R. Weir.

Mr. White, in addition to being president, is also general manager. To Mr. White's untiring energy, perseverance and business ability is largely due the success of the White Lily company and the development and growth of the washing machine industry in Davenport. Until eight years ago Mr. White was a traveling salesman.

Realizing the unlimited field and enormous possibilities in the washing machine line, his energy soon displayed itself in the organization of the White Lily Mfg. Co. in 1902. He became secretary and treasurer as well as general manager of the company and its growth has been marked from the start.

Today the company occupies 3½ acres of land in the "1500" block on the Rockingham Road, practically the entire block and its factory has a floor space of 30,000 square feet. Its daily capacity is 300 finished machines. These are shipped to all parts of the world. Quite recently the company made a heavy shipment to Australia. Six models of machines are made by the company, as follows: "White Lily;" "White Rose;" "White Daisy;" "White Lily" Motor Washer; "Hummer," and "White" Washer.

Howard W. Power, secretary of the reorganized company, started with the company six years ago as bookkeeper. His ability quickly merited recognition and he was gradually advanced to assistant manager and is now taken into the company as secretary and also made a director. In this position he will have general supervision of the office end of the business.

The reorganized company includes in its ranks a number of the leading business men of Davenport. Dick Lane, one of the new members, is president of

the Commercial Club of Davenport and two of the other members, Wilson McClelland and W. R. Weir, are ex-presidents of that organization. C. T. Darling and Charles Schuler, the two remaining new members, have for years been identified with the growth and development of the business interests of the Iowa city.

A. F. Victor of Toledo, Ohio, is the only outside stockholder in the company and there is a reason and a good one, too, for his connection with the company in the capacity of a stockholder. It is a reward for faithful services and splendid accomplishments.

Mr. Victor is an old showman. Having struck the rocks in this business, he one day walked into the eastern office of the White Lily Mfg. Company at Toledo and asked for a job. He was a fluent talker, could sound the merits of his company's products so much faster than his intended customer could find a reason for not wanting to buy, that he invariably made a sale before he left. His success as a salesman was instantaneous. He soon became one of the most successful and highest priced salesman on the road. In recognition of his services, he was placed in charge of the Toledo branch and now becomes a stockholder in the company.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Dayton, Tenn.—The Bailey Hardware Co. has been incorporated with a capital stock of $10,000 by W. C. Bailey, C. L. Locke, Robert Godsey and others.

Cameron, W. Va.—The Sinsel Hardware Co. has been incorporated with a capital stock of $15,000 by E. W. Sinsel, H. S. Sinsel, Clyde W. Rector and others.

Stigler, Okla.—The Stigler Hardware Company has increased its capital stock from $15,000 to $25,000.

Brookneal, Va.—The Webb-Adams Hardware Co. has been incorporated. The officers are: President, R. S. Barbour; vice-president, R. E. Adams; secretary and treasurer, J. E. Webb.

Carlisle, Ark.—R. C. Myers of Barrington, Ill., and associates have gone into the hardware business here and the firm will be known as the Robertson-Myers Hardware Co.

BUSINESS CHANGES.

Fargo, N. D.—L. S. Levy becomes the owner of the Western Hardware Company. The firm name will remain the same and the business will be conducted as before.

Omaha, Neb.—C. A. Shindler has bought the hardware stock of Roy Hickey.

Chenoa, Ill.—Beach Bros. have sold their hardware store to Fulton & Son of Lexington.

Monroe, Ia.—Caffey & Ammer's hardware store has been sold to Elton Worth.

Sibley, Ia.—Geo. P. Reeves has sold his hardware store to Chas. M. Madison.

East Liverpool, O.—E. A. Freshwater has purchased the Showalter hardware store.

Newell, Ia.—De Witt and Brown have disposed of their hardware business.

MISCELLANEOUS.

New Hampton, Ia.—Frank Dolan's hardware store was damaged by fire.

Montreal, Que.—Fire on June 11 did $35,000 damage to the retail hardware store of the J. Walker Hardware Co. on James street.

Warrenton, Ga.—The Warren Hardware Co., alleged to be bankrupt, have filed a schedule of their indebtedness and assets which shows that the company owes $10,723 and has $6,000 due them in accounts.

Goshen, Ind.—J. C. Mossop will open a tinshop in East Washington street.

La Grange, Tex.—George S. Hopper has rented a new store building for his hardware business.

Continental, Ohio.—Lewis W. Simon, a hardware merchant, is reported to have filed a bankruptcy petition which shows his liabilities to be $21,723.71 and assets $12,360.

Biscay, Minn.—A. G. Lhotka will erect an addition to his hardware store.

OBITUARY.

R. D. Warren.

The death is announced of R. D. Warren of the Benedict-Warren Hardware Co., Memphis, Tenn. Mr. Warren was very prominently identified with the hardware jobbing trade of Memphis and was one of

R. D. Warren.

the most popular hardware men in the South. His strong personality, genial disposition and business integrity made him many friends who will deeply regret his demise.

Albert A. Heizmann.

Albert A. Heizmann, who with his brother, C. R. Heizmann, founded the Penn Hardware Works of Reading, Pa., in 1877, and which was incorporated in 1896 as the Penn Hardware Company, died recently at Southern Pines, N. C., at the age of 61 years. The deceased was born in Reading and was prominently identified with the builders' hardware manufacturing industry. When the Penn Hardware Company was incorporated, Mr. Heizmann was appointed a director and made treasurer of the company. In 1901, owing to ill health, he was obliged to relinquish the latter office. For the past five years he had resided in the North Carolina town where his death occurred. Mr. Heizmann formerly took a very active interest in the municipal affairs of Reading, and was regarded as a factor in the industrial growth of that city. He is survived by a widow and five children.

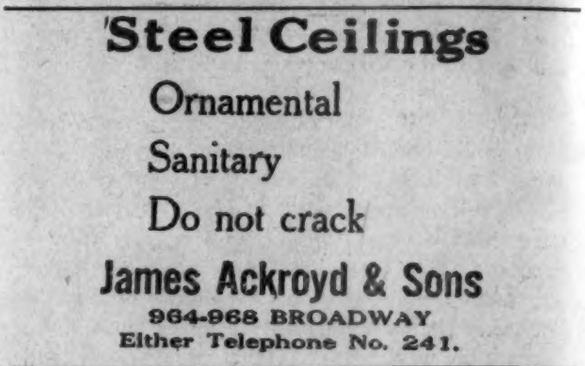
Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

A good seasonable advertisement is that of John E. Bassett & Co., New Haven, Conn., which appeared

in a recent issue of the New Haven *Evening Leader*. The reading matter is interesting and well laid out and displayed. This highly satisfactory advertisement occupied five inches of space, two columns wide.

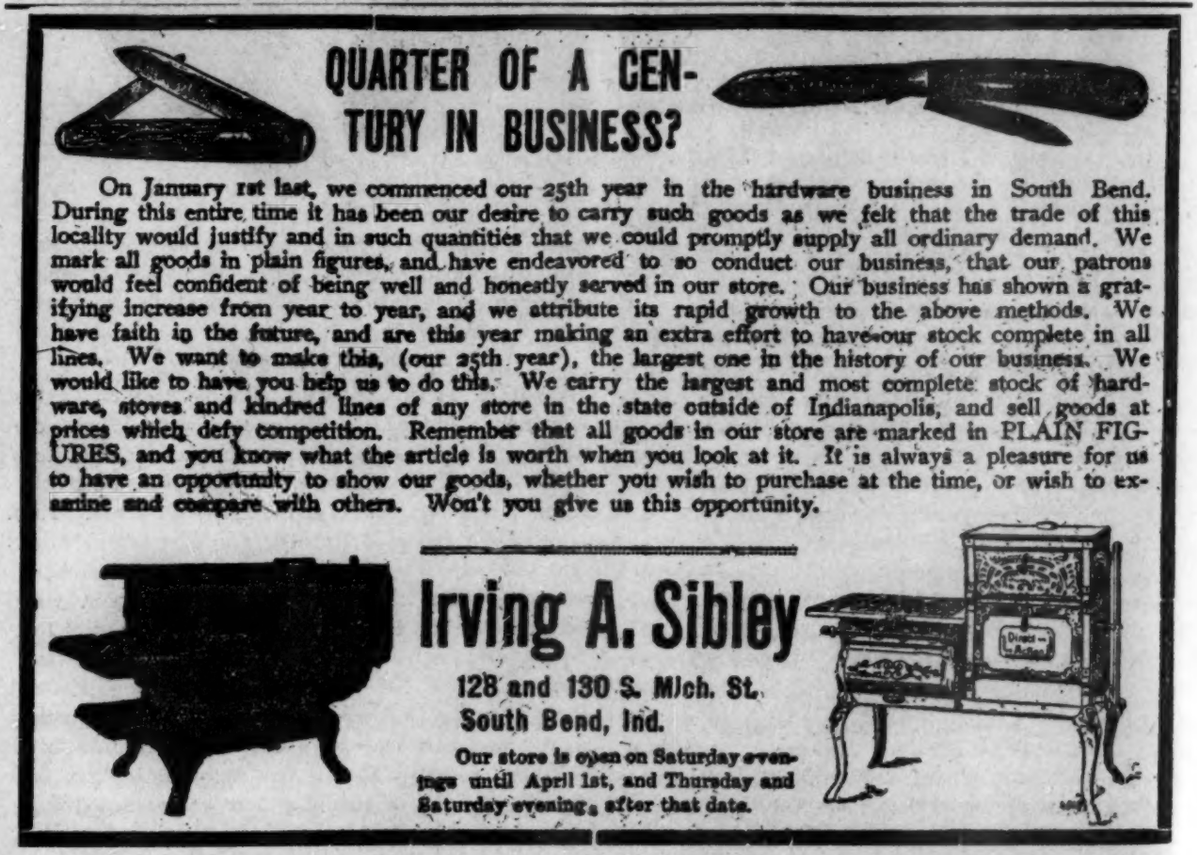
The advertisement of James Ackroyd & Sons, Albany, N. Y., here illustrated, is not an ad. that could be expected to produce results. In preparing copy for a steel ceiling announcement, the ad. writer has such an abundance of good material to work on that the



subject should not be confined to four short lines in a two-inch space. The compositor has handled the matter satisfactorily. The advertisement occupied two inches of space, single column width, in the *Times-Union* of Albany, N. Y.

* * *

The strength of the advertisement of Irving A. Sibley of South Bend, Ind., lies in the text. It is rarely that a better written ad has come under our observation. Unfortunately, however, there is a little more matter than the space allotted can properly accommodate. It is a pity, too, that the word "century" in the top display line should have been divided. In other respects the ad does not merit criticism of an unfavorable character. It appeared in the *South Bend* (Ind.) *Daily Times* of recent date, and occupied the same space that it does here.



Heating and Ventilating

A NEW QUESTION IN THAT WARM-AIR HEATING PROBLEM.

To THE AMERICAN ARTISAN:

In your issue of June 5 we stated that we had a proposition before us concerning which we were asked to furnish 180 degrees of heat in various departments to be used for enameling bedsteads and other such material, and were anxious to know whether it were possible by using a warm-air heater of any manufacture to obtain a temperature of 180 degrees without much of a fluctuation, and whether this could be done with coal or fuel gas.

In your June 12 issue Charles Smith of Chicago replied to our query stating that to have the work done satisfactorily it would be necessary to take a coal or gas furnace at one-third its lowest rated capacity and use an automatic regulator.

A new question arises, however, which we take out of a letter from a warm-air furnace manufacturer, which states that in order to hold 180 degrees of heat in a room it would be necessary to have 190 degrees in the furnace, which would mean that the air would be red hot. The life of the ordinary furnace, therefore, would be very short if it were being put to a continued use of that kind. We would be pleased to hear from Mr. Smith further regarding this matter or others who may be interested in a problem of this character.

ZIMMERMANN'S BLDG. SPECIALTIES CO., LTD.
2131 Magazine Street, New Orleans, La., June 21, 1909.

FURNACE CATALOGUE OF THE BONNOT CO.

The Bonnot Co., Canton, Ohio, are distributing a very attractive catalogue illustrating and describing their Canton Perfect Blast, Canton Oak, Canton Special and Canton Eagle furnaces. Their Canton Eagle is an improved all cast furnace, with corrugated radiator, new inverted cellular fire-pot and new two-way smoke flue. The Canton Special is a new model with steel tubular radiator, secondary radiator and fitted with the new cellular over-draft fire-pot. The Canton Oak is a new departure in oaks, has steel drum and drafts, large feed doors and is fitted with the new cellular over-draft fire-pot. The Canton Perfect Blast furnace is a reliable time-tried furnace, with a great reputation. It is adapted to the heaviest service and is especially good for large heating plants. The catalogue is handsomely and profusely illustrated and contains very comprehensive descriptions of the Canton furnaces. Special attention is called to the new over-draft cellular fire-pot. The Bonnot Co. state that this fire-pot is a long step in advance in cellular fire-pot construction and stands at the head of the list of draft fire-pots. In describing it they say: "The new cellular fire-pot is larger at the bottom than at the top so that the ashes fall away from its sides and give at all times a clean fire surface. The air ducts or cells being inclined inward shoot the heated air over the fire and to the center of the radiator. Its new design is the secret of its success. A man cannot stand on the ceiling neither can ashes rest on a surface that is above it." The catalogue contains hints on furnace setting and management and is very complete in every detail. The Bonnot Co. will be pleased to provide their dealers with these catalogues, and have reserved a place on the back cover in which the dealer's name can be inserted under the words "For sale by." When writing for this catalogue, kindly mention THE AMERICAN ARTISAN.

BOYNTON SQUARE POT FURNACES.

The Boynton Furnace Co., 147-149 Lake St., Chicago, and New York and Jersey City, N. J., request dealers to investigate the merits of Boynton Square Pot Furnaces, if they should be seeking a furnace that will stand by their customers in the coldest winter

Boynton Square Pot "Crusader" Furnace.

weather, without constant attention, and which will not consume what ought to be a season's supply of fuel in two or three months. The accompanying illustration shows the company's square pot "Crusader" furnace, sectional view. These furnaces are constructed on scientific principles, and the manufacturers state that they are not excelled by any warm-air heaters now on the market. When writing the Boynton Furnace Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

"HANDY FURNACE AND ESTIMATING BOOK AND TINNERS' READY REFERENCE."

F. Meyer & Bro. Co., Peoria, Ill., say that every tinner and furnace man should send for a free copy of the "Handy Furnace and Estimating Book and Tinners' Ready Reference," which they are distributing. This is a convenient book to have on hand as the estimate pages include all the items usually required in setting up a furnace so that every time a furnace is sold and estimated on, the specifications can be written down in their proper places on one of the estimate pages. By

using the book in this manner, nothing need be forgotten that will be necessary to finish the work nor can a mistake be made in figuring the same thing twice. There is much information in this book that will be found both practical and valuable in heating work. F. Meyer & Bro. Co. would be pleased to forward copies upon request. When writing them, kindly mention THE AMERICAN ARTISAN.

"SPRAGUE" AND "WESTERN" UNDERFEED FURNACES.

The Sprague Foundry & Mfg. Co., Council Bluffs, Iowa, have recently issued a neatly gotten up catalogue in which a complete description is given of their "Sprague" and "Western" Underfeed Furnaces. In their construction and methods of operation underfeed furnaces differ from most furnaces, the object of the singular construction being the obtaining of more perfect combustion and the maximum degree of efficiency and economy, say the manufacturers. By the burning of waste gases the Sprague Foundry & Mfg. Co. say that users of the underfeed furnace are enabled to use the cheapest grades of bituminous coal with the same cleanliness and efficiency as the higher priced fuels. As the fire in the underfeed is always on top it is claimed that there is no opportunity for the accumulation of gases, and consequently no puffs or explosions to loosen the joints. Underfeed furnaces as manufactured by the Sprague Foundry & Mfg. Co. are made in two styles—the "Sprague" with a cast top radiator and the "Western" with a back radiator. The coal is fed through the magazine or feeder that extends through from the outside of the ash pan below the grate level, up, delivering the fuel in the center of and on a level with the grate. The coal is forced through the feeder by means of a plunger, operated with a ratchet and wood lever. The magazine is supplied with a hopper that extends up and outside the case. As the plunger moves forward it closes the hopper opening completely, preventing the passage of air through the magazine. This feature is designed to obviate any possibility of the coal burning down into the feeder. The "Western" underfeed furnace has a radiator directly back of the main furnace that is made with two cast heads and a shell of charcoal iron. Two diaphragms are so arranged that the escaping gases in passing out are forced down and then up, allowing the absorption of all the heat they contain. The radiator is provided with a direct and indirect draft damper so that when a quick hot fire is desired it may be cut out entirely. The "Sprague" underfeed is an all-cast furnace with a circular top radiator. This radiator is so arranged with a direct and indirect draft damper that when in use the gas is made to pass entirely around it instead of dividing, giving twice the travel and more opportunity for the absorption of the heat. Both furnaces have a circular grate that revolves on rollers and operated by a pinion and shaft. By revolving this grate any part of the fire may be brought to the front of the furnace permitting an easy access through the clinker valve for the removal of any foreign matter. When writing the Sprague Foundry & Mfg. Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

FURNACE CATALOGUE OF THE MONROE FOUNDRY AND FURNACE CO.

The Monroe Foundry & Furnace Co., Monroe, Mich., are distributing a handsome new catalogue in which their extensive line of Floral City furnaces are fully described. The Monroe Foundry & Furnace Co. state that they have never catered to the demand for a cheap furnace, although they make certain furnaces which can be sold in competition with this class of heaters. In their opinion, the best is none too good and no responsible dealer can afford to risk his business reputation by recommending inferior and unsatisfactory furnaces. In their catalogue they have illustrated a line of furnaces which they believe will meet any and every demand. The catalogue is artistically printed in black and red ink, giving every page a very attractive appearance. The cover is a handsome one in four colors, the background being a dark green, with lettering and ornamentation in gray, red and gold. When writing for a copy of this catalogue, kindly mention THE AMERICAN ARTISAN.

WISE WATER HEATERS FOR GAS.

The Wise Furnace Co., Akron, Ohio, are distributing a little booklet which is entitled "A Little Book About Wise Water Heaters." In it, they state that Wise gas hot water heaters are designed to meet the popular demand for a heating system for convenience, simplicity and efficiency. They are applicable to any use to which a coal boiler is put, the heating of residences, apartment houses, store rooms or business blocks. They can be installed beside a coal boiler and be used independently or as an auxiliary. The Wise Furnace Co. claim that with the Wise heater a basement is not necessary, as the heater can stand on the same floor that is to be heated and in an out-of-the-way place. These heaters are very compact, occupy small space, are sensitive and quick acting. They are easy to adjust to the changes of the weather, easy to take care of, have no parts to wear out or need repairs and are moderate in price. The little booklet contains a complete description of the construction of these heaters, and will be sent to anyone interested in them, upon request. When writing, kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

Thomas P. Healy, manager of the Boston branch of the International Heater Co., died recently at his home in Chelsea, Mass. Mr. Healy had been identified with the International Heater Co. since its formation and was well and favorably known to the trade.

Percy Elliott, Boston, Mass., secretary of the New England Stove Manufacturers' Association, has been engaged by the Federal Furnace League to solicit subscriptions for the League's publicity fund, it being the purpose to collect from furnace manufacturers $1.00 per furnace per year, in order to raise at least $100,000 per year to be appropriated to advertising.

Tinshop

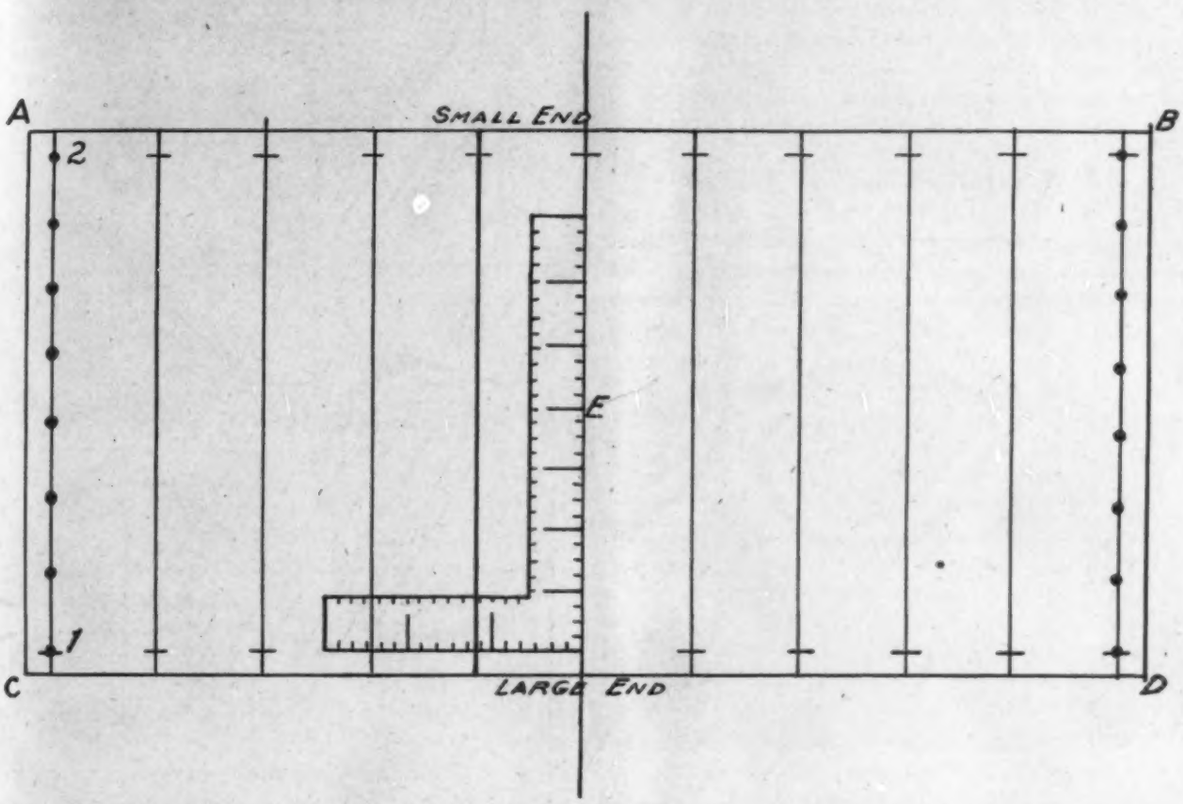
PATTERN FOR THAT SHEET STEEL SMOKE STACK.

To THE AMERICAN ARTISAN:

In your valuable paper of June 5, one of the brothers in the trade asked for a rule to lay out a smoke stack of heavy iron, namely, 16, 14, 12 or 10, or any other thickness. In sending you the rule for the benefit of those who may not know how to solve the problem, I wish to say that it must be borne in mind that all sheet metals shrink just one thickness of themselves in forming into a cylinder or pipe, and 3 1/7 times the thickness of the metal must be added to the circumference to make up for this shrinkage.

Now for the pattern. Let the rectangle *ABCD* represent the sheet from which the stack is to be made. Let *CD* be the required circumference of the large end. Make *AB* 6 2/7 times the thickness of the metal shorter than the large end. Draw a straight line on each end of the sheet as far from the edge as is required for the points to lap. Lay off on each side of the center as many spaces as you require rivets around the stack. Draw lines from points on each end as shown in drawing; then take the square, and place the heel on the rivet hole of the center line with long blade following the line across the sheet. The point where the short blade cuts the next line is the center of the rivet hole. In that line repeat this operation until you have located all of the rivet holes on the large end of the sheet. Then set the trammel points equal to points *1* and *2* in the drawing, using the points on the large end as centers and marking rivet centers on the small end. This will give the rivet holes of both ends on a curved line the radius of which would reach half way around the earth. I have used this rule for more than twenty-five years and have never gone wrong on it.

Your subscriber may wish to know why I cut the small end of the pipe 6 2/7 times the thickness of the iron shorter than the large end; because it must be the required diameter on the outside that it is on the inside at the other end. The rule that I use in calculating circumferences is: As 7 is to 22, so is the diameter to the circumference; or, in plain English, the circumference is 3 1/7 times the diameter. This is accurate enough for all practical purposes.



Sketch of Pattern.

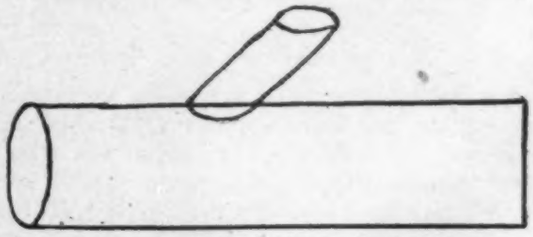
BENJAMIN F. FURRY.

Paulsboro, N. J., June 9, '09.

PATTERN WANTED FOR TEE JOINT.

To THE AMERICAN ARTISAN:

I would like to be informed through the columns of your valuable paper how to lay out a tee joint pattern, the tee to be smaller than the main pipe, also to be at an angle as per sketch.



Sketch Showing What Is Wanted.

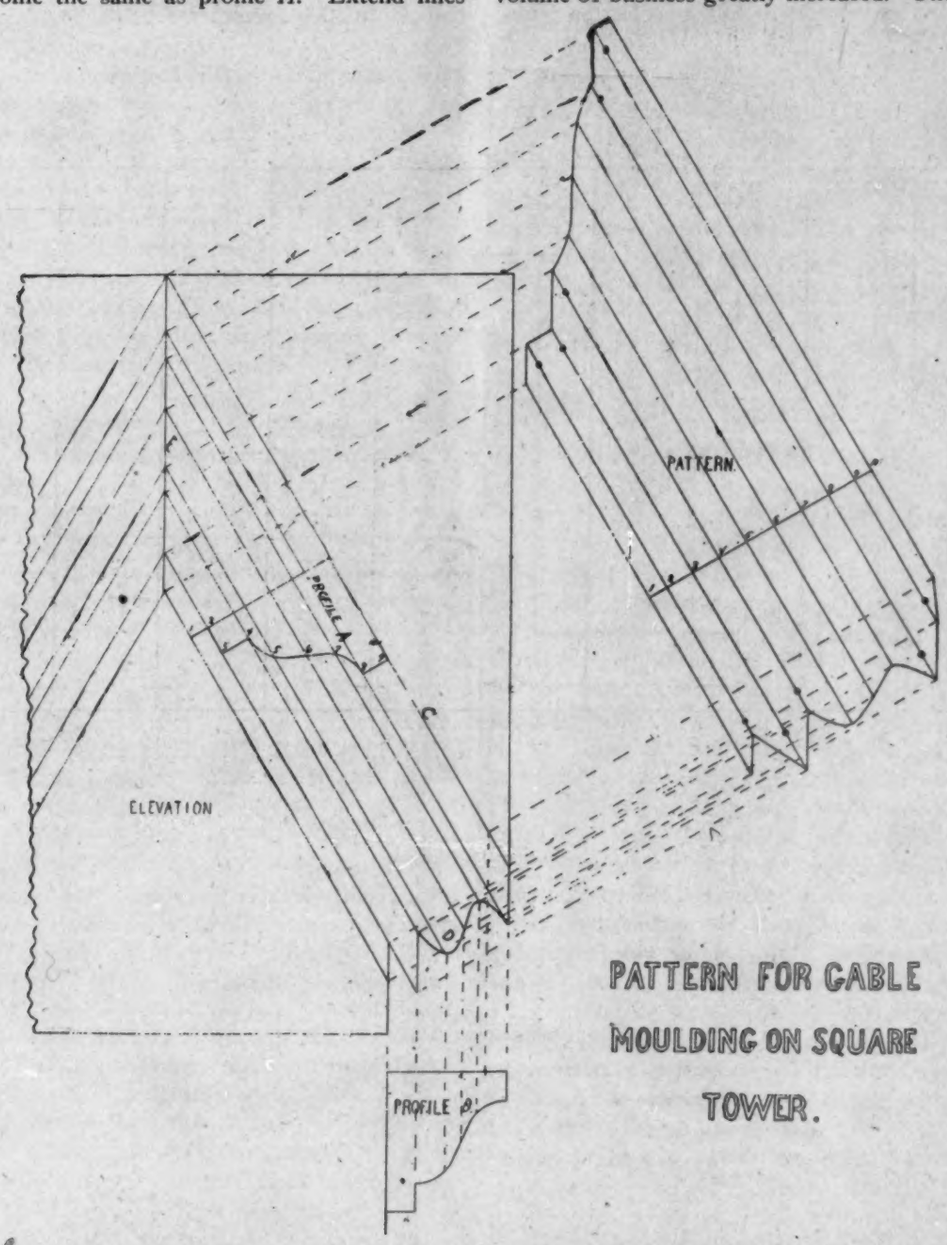
A. J. JACKSON.

St. Louis, Mo., June 23, 1909.

PATTERN FOR GABLE MOULDING ON SQUARE TOWER.

BY G. L. GRAY.

First draw elevation the pitch required, placing profile *A* on line *C* as shown. Space the curved parts of profile *A* into any convenient number of equal parts and draw lines through all points parallel with line *C* intersecting miter line *E*, and extend them indefinitely at *D*. Next draw profile as shown, spacing the curved part of profile the same as profile *A*. Extend lines from all points in profile *B* intersecting lines of same numbers just drawn from profile *A*. Drawing lines through the intersecting points will give miter line *D*. Draw stretchout line for pattern at right angles to line *C* and place spacings on same from profile *A*. Draw parallel lines indefinitely through all points in stretchout. Place T-square at right angles to line *C*. Draw lines from all points in miter lines *E* and *D*, intersecting lines of corresponding numbers in stretchout. Drawing lines through the intersecting points will give pattern required.



PATTERN FOR GABLE MOULDING ON SQUARE TOWER.

THE BERGER MFG. CO. INCREASE CAPITAL STOCK.

The stockholders of The Berger Mfg. Co., Canton, Ohio, voted unanimously at a special meeting, on June 19, 1909, to increase the capital stock from $2,000,000 to $5,000,000. The purpose of this increase is to provide for additions, extensions and improvements to keep pace with the growing demand for their various products. A larger output will be secured and the volume of business greatly increased. One of the first improvements will be the erection and enlargement of warehouse and shipping facilities, so that all orders may be promptly executed and a much more complete stock carried at all times.

APOLLO BEST BLOOM GALVANIZED SHEETS.

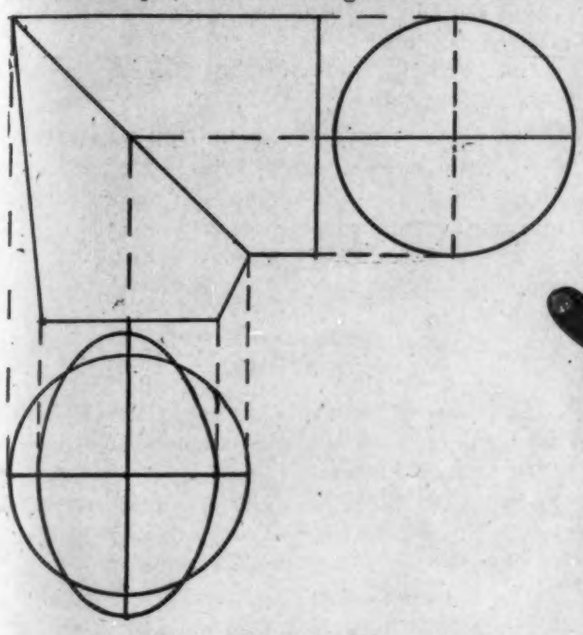
The American Sheet & Tin Plate Co., Frick Building, Pittsburgh, Pa., are distributing a pretty little blotter on the enameled side of which they take occasion to state that Apollo Best Bloom Galvanized

Sheets enjoy the most favorable reputation in all parts of the American continent, and on other continents as well, for the reason that they are made from the best and most carefully selected raw materials, by modern, scientific methods, and by expert workmen. These sheets are declared to be true to gauge, uniform in working quality and trustworthy in every respect. The non-corrosive coating, the manufacturers say, is always reliable. When writing the American Sheet & Tin Plate Co., kindly mention THE AMERICAN ARTISAN.

WHO WILL LAY THIS OUT?

To THE AMERICAN ARTISAN:

Herewith is a sketch of a two-pieced elbow from round to ellipse, and concerning which I would like



Pattern Wanted for This.

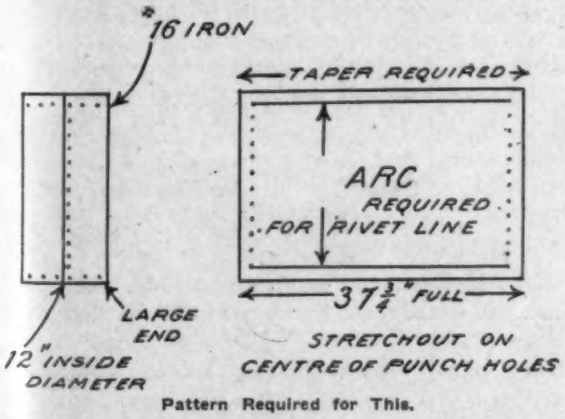
some information that would aid me in laying out the ellipse end. W. E. D.

Eldorado, Kans., June 15, 1909.

SEEKS AID OF BROTHER TINKS.

To THE AMERICAN ARTISAN:

I would like to be informed as to what allowance to make in constructing a heavy pipe from 18, 16, 14



Pattern Required for This.

black iron, so that the slip joint will fit snugly with the proper taper.

I would also like to be given a rule by which I can form or strike an arc of large radii, to be the rivet line for smoke-stack work; for example, a 12-inch smoke pipe.

I would further like to be informed how to lay out a pattern for a heavy pipe so that when all the holes are punched the ends will fit and the rivet holes will match, in order that when several joints are put together it will be a straight pipe or smoke-stack.

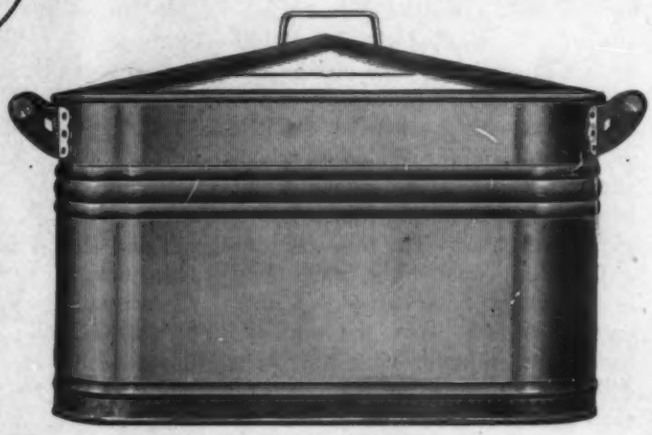
It is not practical in a very small shop to strike an arc with a piece of wire or a string. Now 37¾ inches full is the circumference of 12 inches, but the heavy iron seems to contract, and the diameter is (in one way) much less when it is run through the rollers.

WM. QUARITIUS.

Vicksburg, Miss., 209 S. Walnut Street, June 20, 1909.

ELLIOTT ANTI-RUSTING TINWARE.

The Elliott Mfg. Co., Warren, Ill., guarantee every piece of tinware that they manufacture to be proof against rust. The accompanying illustration shows



Type of Elliott Anti-Rusting Wash Boiler.

one of their wash boilers, which they state is meeting with great success. Should any of their goods be returned to them rusted out The Elliott Mfg. Co. guarantee to replace same with new goods free of charge. This guarantee is issued by them with every article sold. When writing The Elliott Mfg. Co., kindly mention THE AMERICAN ARTISAN.

NEW OFFICE BUILDING FOR FRIEDLEY-VOSHARDT CO.

Friedley-Voshardt Co., Chicago, manufacturers of architectural ornaments, steel ceilings, etc., have broken ground for a new office building, which will occupy a space 60 x 75 feet, four stories and basement, fronting on Halsted street, and their new address will be 733, 735 and 737 S. Halsted street, between Mather and Polk streets. The new building will connect with their present factory building on Mather street. This addition will give them a building with a frontage of 60 feet on Halsted street and 225 feet deep, with a frontage on Mather street of 150 feet. They expect to be in their new home about October 1, 1909, and will be pleased to greet all their old friends as well as the new.

"WHEELING" METAL TILE.

The Wheeling Corrugating Co., Wheeling, W. Va., have put on the market the "Wheeling" Metal Tile which is declared to be an inexpensive substitute for porcelain or ceramic tile. The manufacturers state that it is the best finish for any room which it is desirable to keep bright, clean and sanitary, hence its usefulness as a wall covering for bathrooms, kitchens, restaurants, butcher shops, etc. It is manufactured in several sizes of tile, stamped in sheets 2x4 or 2x8 feet. Moldings, wainscot caps and baseboards are also made to be used with the tile. Special nails with thin heads are furnished for applying. After having been applied, the tile should have two or three coats of good enamel paint. "Wheeling" Metal Tile can be applied to old or new buildings. It is easy to erect. When writing the Wheeling Corrugating Co., kindly mention THE AMERICAN ARTISAN.

"TITELOCK" METAL SHINGLES.

The Milwaukee Corrugating Co., Milwaukee, Wis., have recently issued a highly artistic booklet illustrating and describing their "Titelock" Metal Shingles, "a perfect protection." The booklet comprises 16 pages and cover, and is printed in two colors, the cover being handsomely embossed. "Titelock" metal shingles are adapted for residences, schools, churches, hospitals, railroad depots, public buildings, etc., of all kinds and sizes, having roofs of three inches or more pitch to the foot. The manufacturers state that they are perfectly water-tight, while their artistic qualities and durability have earned for them a reputation among the trade. As to the comparative cost of "Titelock" metal shingles, with other shingle material, the Milwaukee Corrugating Co. state that they cost less than slate and are as low in price as wooden shingles in most sections of the country, being in fact much cheaper where the comparative wearing qualities are considered, for the reason that they will outlast several wooden shingle roofs, besides being more ornamental. The sidelock on "Titelock" shingles is so formed that the matching beads are absolutely straight and true to size. The outer flange is pressed to such an angle that after it is inserted into the recess of the adjoining shingle the act of laying the shingle springs it into a perfectly tight contact at both the top and bottom with the beads positively nested. This construction provides amply for expansion and contraction of the metal. The nailing flange being covered by the inserted shingle, the nails are underneath and not exposed. "Titelock" metal shingles, because of simple and exact construction, are easily and rapidly applied. Any ordinary mechanic can lay them, all the tools that are required being a hammer and a pair of tinner's shears. There is no soldering or hammering of the shingles, because they interlock and are water-tight. When writing the Milwaukee Corrugating Co. for descriptive booklet, kindly mention THE AMERICAN ARTISAN.

Some merchants' understanding of merchandising is a mis-understanding.

NOTES AND QUERIES.

BRASS SHIPPING TAGS.

From C. F. Stecher Camp Point, Ill.

Will you please tell me where I can have brass shipping tags made?

Ans. W. W. Wilcox Co., 201 Lake St., Chicago, Ill.

ADDRESS OF ANDERSON, NORDEN & COMPANY.

From St. Louis Lightning Rod Co., St. Louis, Mo.

Kindly give us the address of Anderson, Norden & Co., who manufacture lightning demonstration machines.

Ans.—18 W. Randolph Street, Chicago.

OAK TUBS.

From Thos. Conron Hardware Co., Danville, Ill.

Will you kindly give us the address of a manufacturer of oak tubs?

Ans.—Fred K. Higbie Co., 205 Railway Exchange Bldg., Chicago, Ill.

GRAIN SPROUTING AND GERMINATING APPARATUS.

From A. W. Grunwaldt, Abrams, Wis.

Can you give me the addresses of makers of grain sprouting and germinating apparatus?

Ans.—Webster Mfg. Co., 1075 W. 15th St., Chicago, Ill.; Weller Mfg. Co., 118 North Ave., Chicago, Ill.

ITEMS.

The Gastonia Roofing Company, Gastonia, N. C., has been organized with a capital stock of $50,000 by J. K. Long and others.

Francis W. Bird has been appointed receiver in bankruptcy for the United Cornice & Skylight Works, 153 Lewis street, New York City.

The Federal Roofing Co., New York City, has been incorporated with a capital stock of $5,000, by Martin W. Murphy, The Bronx; Daniel G. Daniels, 138 Union St., Brooklyn, and Rudolph W. Mayer, Rutherford, N. J.

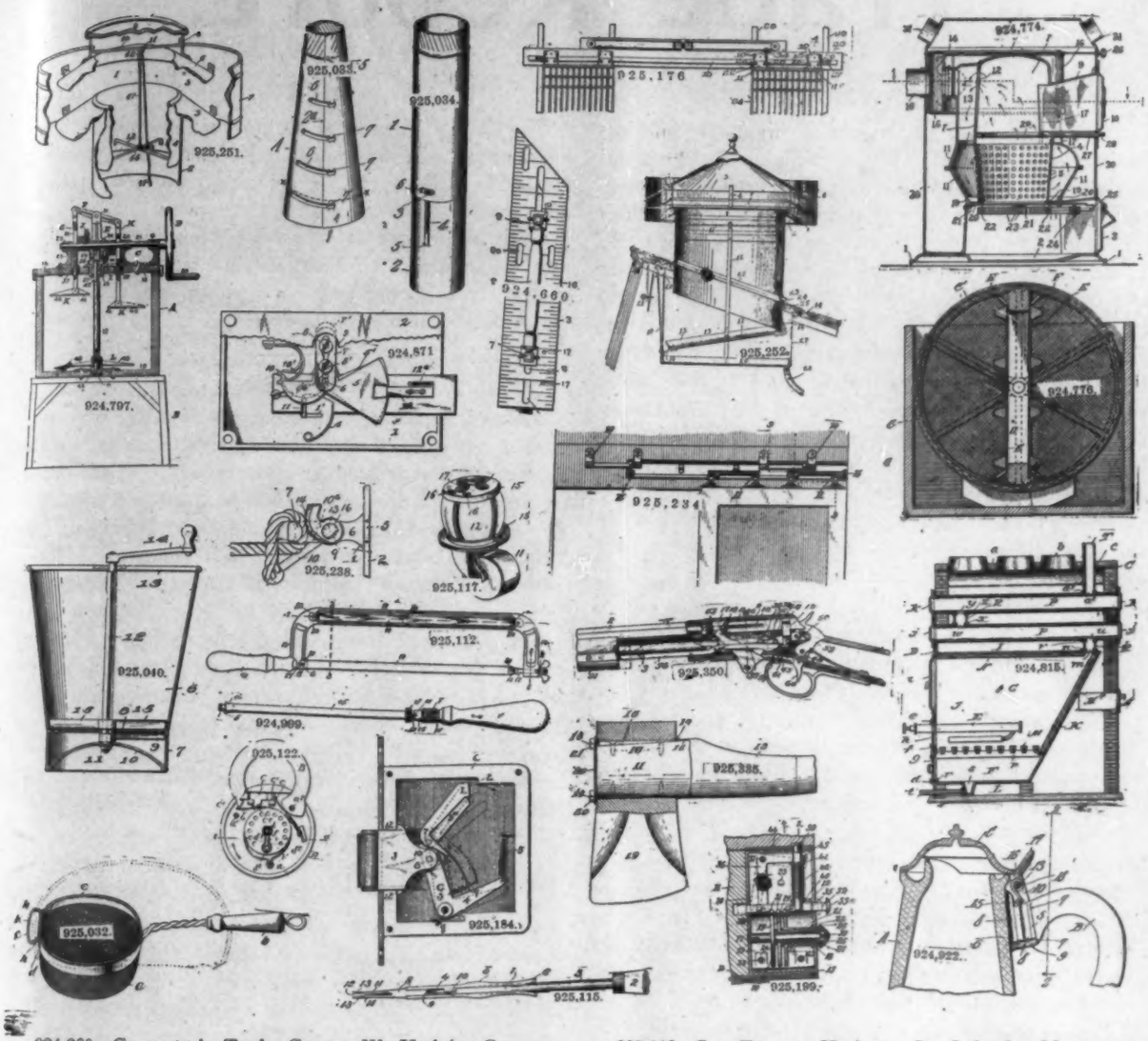
F. Meyer & Bro. Co., Peoria, Ill., advise that they have perfected their nested tin hot-air pipe and they are now prepared to furnish it in any quantity. This pipe has been gotten up on the same general lines as their nested cold-air pipe.

W. C. Hopson & Co., Grand Rapids, Mich., announce that they are prepared to take care of the wants of the trade for sheets and formed products—roofing, eaves trough, conductor pipe, etc. They invite correspondence regarding prices, etc.

The Bangor Structural & Roofing Slate Company, Phillipsburg, N. J., has been incorporated with a capital stock of $2,000, to manufacture slate products. The incorporators are: G. D. Shimer, Kate S. Shimer, Amelia Bonney, George E. Flora and G. L. Shimer.

The McKeesport Tin Plate Company, McKeesport, Pa., will spend about $2,000,000 in the construction of ten new mills, practically doubling its present capacity. The company recently increased its capital stock from $600,000 to $1,200,000. When the improvements contemplated are made, the company will have 20 hot mills.

NEW PATENTS.



924,660—Carpenter's Tool. George W. Hodgin, Greensboro, N. C. Filed Oct. 20, 1908. Serial No. 458,677.

924,774—Heating-Furnace. Lewis C. Hanmer, Detroit, Mich., assignor to Dimpsey-Hanmer Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 17, 1908. Serial No. 448,911.

924,776—Washing-Machine. Benjamin J. Harrell, Eastman, Ga. Filed Mar. 27, 1909. Serial No. 486,211.

924,797—Washing-Machine. James Kolin, Chicago, Ill. Filed Feb. 23, 1909. Serial No. 479,399.

924,815—Hot-Air Furnace. Frank E. Nelson, Los Angeles, Cal. Filed Apr. 13, 1908. Serial No. 426,711.

924,871—Permutation-Lock. Paul Ziron, New York, N. Y. Filed June 23, 1908. Serial No. 439,963.

924,922—Cover-Hinge for Handled Vessels. Robert A. Neely and Edgar L. Holland, Searcy, Ark. Filed Sept. 24, 1908. Serial No. 454,504.

924,999—Screw-Driver. Carl Kummer, Hampshire, Ill. Filed May 16, 1907. Serial No. 374,097.

925,032—Strainer. William T. Russell, Wellesley, Mass. Filed Mar. 2, 1908. Serial No. 418,689.

925,033—Stovepipe-Joint. Jesse T. Sappenfield, Milan, Kans. Filed Aug. 20, 1908. Serial No. 449,464.

925,034—Stovepipe-Joint. Jesse T. Sappenfield, Milan, Kans. Filed Aug. 20, 1908. Serial No. 449,465.

925,040—Straining-Pail. Perley L. Sennott, Chicago, Ill. Filed May 23, 1908. Serial No. 434,677.

925,115—Screw-Driver. Alfred Loewenberg, Indianapolis, Ind., assignor, by mesne assignments, to William Meyer, Chicago, Ill. Filed Apr. 18, 1907. Serial No. 368,809.

925,112—Saw-Frame. Herbert J. Leland, Montague, Mass., assignor to Millers Falls Company, Millers Falls, Mass., a Corporation of Massachusetts. Filed Jan. 23, 1909. Serial No. 473,867.

925,117—Caster-Attaching Bearing-Box. Valentine C. Luppert, Williamsport, Pa. Filed Apr. 17, 1909. Serial No. 490,497.

925,122—Lock. Giulio Merlonetti, West Chester, Pa. Filed Apr. 2, 1909. Serial No. 487,564.

925,176—Door-Hanger. Francis O. Hanson, Indianapolis, Ind. Filed Jan. 8, 1908. Serial No. 409,810.

925,184—Check for Swing-Doors. Harry L. Hess, Ashland, Ohio, assignor to The Columbian Hardware Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 29, 1905. Serial No. 271,808.

925,199—Lock. Walter J. Lambert, North Yakima, and Elsworth P. Dopps, Sunnyside, Wash. Filed Mar. 18, 1908. Serial No. 421,798.

925,234—Door-Hanger. George L. Schnepf, New York, N. Y. Filed Sept. 11, 1908. Serial No. 452,538.

925,238—Clothes-Line Holder. Harry B. Shreve, Galesburg, Ill. Filed Oct. 22, 1908. Serial No. 459,038.

925,251—Ventilator-Clip. William F. Warden, Akron, Ohio. Filed Oct. 28, 1907. Serial No. 399,544.

925,252—Ventilator. William F. Warden, Akron, Ohio. Filed Apr. 25, 1908. Serial No. 429,110.

925,335—Ax-Handle Protector. Anton H. Gruis, Sibley, Iowa. Filed Oct. 13, 1908. Serial No. 457,509.

925,350—Magazine-Rifle. Warren G. Kramer, Orwigsburg, Pa. Filed Feb. 20, 1909. Serial No. 479,128.

Trade Report.

HARDWARE.

The hardware market is somewhat unsettled owing to the spotty demand. There was very little change in the volume of business as compared with a week ago, but prices are somewhat irregular and for lines for which the demand has fallen off they are weak. There is some price shading in certain lines in order to secure business that seems attractive. The general sentiment in the trade is cheerful and while the technical conditions will regulate prices for the immediate future, there is a feeling that in the long run prices will show substantial improvement if the present prospect of good crops is materialized in the harvest. The best current business is in builders' hardware, which is rather heavy in the local market, owing to the extensive building operations that are now going on in this city. The business in wire nails is fair but the amount is not large. The local demand for cut nails has improved substantially. Buying of barb wire is lighter.

The base price of wire nails at the mill for jobbers is $1.70 per keg. The base price is $1.75 at the mill for full carloads and $1.90 at the mill for less than carloads. The base price of cut nails at the mill for jobbers is $1.80 per keg. The base price is $1.85 for full carloads at the mill, and $1.90 for less than carloads at the mill.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car lots, $1.93; retailers' car lots, $1.98; $2.05 out of store; painted barb wire, jobbers' car lots, $1.93; retailers' car lots, $1.98, with 30 cents for galvanizing; plain wire to jobbers in car lots, $1.93, and to retailers in car lots, $1.98.

Copper slating nails are quoted at 22 cents.

TIN PLATE.

The market for tin plate is characterized by considerable activity. The American Sheet & Tin Plate Co. are operating at about 85 per cent of capacity while the independents are working about 90 per cent of their mills. Prices remain firm. For 100-lb. I. C. coke plates the price is $3.45 Pittsburgh, subject to a rebate of 5 cents per box on large orders.

Quotations are as follows:

American coke, tin, I. C., from store, New York:	
Bessemer steel, 100 lbs., 14x20	$3.95@4.00
Bessemer steel, 95 lbs., 14x20	3.85@3.90
Bessemer steel, 90 lbs., 14x20	3.75@3.80
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.05@4.10
Worcester grades, 14x20, 100 lbs	3.90@3.95
Worcester grades, 20x28, 200 lbs	7.75@7.85
For prompt shipment, f. o. b. mill:	
Coke, tins, 14x20, I. C	3.60@3.65
Coke, tins, 14x20, 100 lbs	3.45@3.50
Coke, tins, 14x20, 95 lbs	3.40@3.45
Coke, tins, 14x20, 90 lbs	3.35@3.40
Charcoal terne, 20x28, I. C	7.05@7.10
Charcoal terne, 20x28, 200 lbs	6.75@6.80

Usual difference for odd sizes and weights:

SHEETS.

The sheet mills are booking a fair amount of business. Stocks in the hands of jobbers are at rather a low ebb. Prices are being pretty well maintained, and while some concessions are being made, they are not as general as they have been for some time past. The American Sheet & Tin Plate Co. is operating at about 75 per cent of capacity, while the independents are active to the extent of 80 per cent.

COPPER.

There is a slightly easier market for ingot copper, with a very quiet demand for consumption, though the export demand is keeping up very well. The collapse of the recent heavy speculation in the London market has had a depressing effect upon the markets on this side, and is held to be largely responsible for the heaviness here. Predictions of heavy exports of copper this month seem likely of fulfilment, as there were recently shipped from New York 2,502 tons, making 22,242 tons since June 1. In May there were exports of 31,473 tons, and if an average of 1,000 tons a day for the rest of the month is maintained the June total will exceed that of May. The London market shows a decline of £1 5s for the week on both spot and futures.

Extreme fluctuations for the year:

	Highest.	Lowest.
Lake	14.55	12.55
Electrolytic	14.25	12.12½
Casting	14.12½	12.00
London, spot	£64 2 6	£54 12 6
London, future	64 17 6	55 10 0
London, best selected	67 15 0	59 0 0

NICKEL.

Nickel is quiet and unchanged. For large lots 40@48c is asked, while 50@55c is asked for less than ton lots.

SHEET ZINC.

Sheet zinc is firm at 7¼@7⅞c in cask lots and 8¼@8⅞c in less than cask lots.

SPELTER.

There has been a steady market for spelter, the New York market being nominally unchanged at 5.45c for spot and July. St. Louis is easier at 5.30@5.32½c. The Boston jobbing price is firm and at 5¾@6c in small lots.

ALUMINUM.

There is a fair demand for aluminum and prices are steady. No. 1 ingots for smelting are offered at 24c per pound in ton lots, and No. 2 ingots at 23@25c in carloads for 90 per cent pure. Rods and wire are being held at 32c a pound in ton lots, and sheets at 32c a pound in ton lots.

COKE.

The demand for coke in the local market is quieter but the market is steady. Best grades of foundry coke are quoted at $2.25. Deliveries in the latter part of the year are being negotiated on a basis of $2.25 and upward. Prices on furnace coke are steady and range from $1.75@1.90.

IRON BARS.

This market is a little less active and prices are unchanged. Quotations are as follows: 1.40@1.45c for best refined bars and 1.35@1.40c for the ordinary.

STEEL.

There is still a very active demand for finished steel, especially from the railroads, who are preparing to meet the demand for more rolling stock, which it is expected will materialize later in the year. The result of this increased demand for cars and equipment, will bring a tremendous increase in the volume of business to the steel mills, particularly for plates and shapes. This new business, added to that placed previously, will force the mills to operate to their full capacity.

The new orders placed during the past week have been lighter than in recent weeks, but the specifications on contracts are very heavy, especially in the wire department, where the specifications during June have been of record figures. Fewer rail contracts have been placed lately, but the month's business in steel rails is expected to reach a total of 300,000 tons. Since the first of June the contracts placed for fabricated steel have amounted to about 65,000 tons, and a total of 125,000 tons is indicated for the month.

In the structural steel department the orders placed last week aggregated about 40,000 tons. Tenders have been submitted on 140,000 tons of bridge and building work, and there are inquiries in the market for 90,000 tons additional. In addition to this, there are proposals in sight for about 300,000 tons of steel, the outlook for a heavy business in the fall being excellent.

A tremendous increase in the volume of steel rail orders is predicted shortly, and one manufacturer is reported as estimating the probable tonnage for 1910 as about 5,000,000. The record tonnage was in 1906, when 3,977,889 tons were rolled. In 1908 this had fallen off to 1,921,611 tons, this being the low mark of recent years.

PIG IRON.

In the New England district the iron market continues dull, but in New York and the West a very fair business is being done. At the time that the New England salesmen were doing an excellent business, two or three months ago, the West was quiet. Now the conditions are reversed—the eastern buyers seem to have been pretty well supplied for the time being, while an excellent demand is reported in the West.

In the local market, there are some good-sized inquiries. There is considerable strength in the situation, especially for forward delivery. For the last quarter it is doubtful if any orders could be placed, except at an advance of 25@50c per ton over the prices current for spot or early delivery.

The northern furnaces are in an especially strong position, and there has been a general advance of 25c per ton during the week. The quotation on Pennsylvania and New York iron for New England delivery is now $17.75@18.50 per ton, though some of the furnaces would undoubtedly shade this a little on an attractive order. An increasing number of the merchant furnaces are out of the market altogether, some well known furnaces having withdrawn during the week.

There does not seem to be quite so much buoyancy in the South as in the North, though the situation is as strong in Alabama as previously noted. The Alabama furnaces are generally firm at $12 per ton for No. 2 foundry iron, with a premium being asked for delivery in the last quarter, while it might be possible to shade this a trifle in the case of an order for nearby delivery, attractive in tonnage or conditions. The Virginia furnaces are holding their iron firm at $14@14.50 per ton, Roanoke.

CHICAGO MARKET.	
Lake Superior charcoal	$19.50@20.00
Northern foundry No. 1	17.00@17.50
Northern foundry No. 2	16.50@17.00
Northern foundry No. 3	16.00@16.50
Southern foundry No. 1	16.35@16.85
Southern foundry No. 2	15.85@16.35
Southern foundry No. 3	15.35@15.85
Southern foundry No. 4	14.85@15.35
Southern No. 1, soft	16.35@16.85
Southern No. 2, soft	15.85@16.35
Southern gray forge	13.85@14.35
Southern mottled	13.60@14.10
PITTSBURG MARKET	
Bessemer, valley	15.25@15.50
Bessemer, Pittsburg	16.15@16.40
No. 2 foundry, Pittsburg	15.90@16.40
Gray forge, Pittsburg	14.90@15.15
Basic, valley	15.00@15.25
Basic, Pittsburg	15.90@16.15
BIRMINGHAM MARKET.	
No. 1 foundry	12.00@12.25
No. 2 foundry	11.50@11.75
No. 1 soft	12.00@12.25
No. 2 soft	11.50@11.75

Matthew, Addy & Co., Cincinnati, say in their weekly report:

"The iron market continues firm and without doubt confidence is increasing each day. While the past week has been nothing phenomenal, there has been steady buying in a small way and several large contracts have been placed. Prices have stiffened in every department of the pig iron industry and an advance is reported on Basic and Bessemer in the Pittsburg district. Ohio furnace men too are feeling decidedly optimistic, and while $14.50 may be considered the current quotation for No. 2 foundry in the Ironton district, some of them are staying out of the market rather than accept at this price. In Birmingham the majority of the large producers are now holding at $12.00 and some sales have been made on that basis.

"The decided activity of the railroads in placing heavy orders for equipment has given a stimulus to the situation. Naturally this is felt in all directions and is most encouraging.

"There has been a demand for Basic iron from the steel makers and several round lots have been placed. The fact that this will be the banner month of the year so far in the shipment of steel, is in itself significant. The tone of the market is certainly healthy and the feeling is that before long we will see old-time activity."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$16 65@$17 15
North'n Fdy., No. 2	16 15@ 16 65
North'n Fdy., No. 3	15 65@ 16 15
Southern Fdy., No. 1	16 35@ 16 85
Southern Fdy, No. 2	15 85@ 16 35
Southern Fdy., No. 3	15 35@ 15 85
Southern Fdy., No. 4	14 85@ 15 35
Southern No. 1 Soft	16 35@ 16 85
Southern No. 2 Soft	15 85@ 16 35
Southern Gray Forge	13 85@ 14 35
Southern Mottled	13 60@ 14 10
Lake Sup. Charcoal	19 50@ 20 00
Southern Silveries, 4% Silicon	17 60@ 18 10
Southern Silveries, 5% Silicon	18 10@ 18 60
Southern Silveries, 6% Silicon	18 60@ 19 10
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	16 40@ 16 85
Standard Bessemer	17 00@ 17 50
Alabama Basic	16 35@ 16 85

BLACK STEEL SHEETS.

No. 12 per 100 lbs.	$2 20@$2 30
No. 14 per 100 lbs.	2 25@ 2 35
No. 16 per 100 lbs.	2 35@ 2 45
Nos. 18-20 per 100 lbs.	2 60@ 2 65
Nos. 22-24 per 100 lbs.	2 65@ 2 70
No. 26 per 100 lbs.	2 70@ 2 75
No 27 per 100 lbs.	2 75@ 2 80
No 28 per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10 per 100 lbs.	$3 05@$3 10
Nos. 12-14 per 100 lbs.	3 05@ 3 10
No. 16 per 100 lbs.	3 05@ 3 10
Nos. 18-20 per 100 lbs.	3 15@ 3 25
Nos. 22-24 per 100 lbs.	3 30@ 3 35
No. 26 per 100 lbs.	3 50@ 3 55
No. 27 per 100 lbs.	3 70@ 3 75
No. 28 per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24 per 100 lbs	$4 90
No. 26 per 100 lbs.	5 00
No. 27 per 100 lbs.	5 10
No. 28 per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20	$3 05
" " No. 22-24	3 10
" " No. 25-26	3 15
" " No. 27	3 20
" " No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Stickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	18 c
Commercial ½ & ½ per lb.	17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks case, per cwt.	$7 15
300 lb. Casks per cwt.	7 15
Sheets per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils per 100 lbs.	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.
Plumbs 40%

Coopers'.
Barton's 15%
White's 15%

Railroad
Plumbs 40%

Ship.
Plumbs 40%
White's 15%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells, Loaded—
Loaded with Black Powder 40%
Loaded with Smokeless Powder, medium grade 40 & 5%
Loaded with Smokeless Powder, high grade 40 & 10 & 10%

Union Metallic Cartridge Co.:
New Club, Black Powders 40%
Nitro Club, Smokeless Powders 40 & 5%
Arrow, Smokeless Powders 40 & 10 & 10%

Winchester:
Smokeless Repeater Grade 40 & 5%
Smokeless Leader Grade 40&10&10%
Black Powder 40%

Gun Wads—per 1,000.
Winchester Gun Wads 15%

Powder.

	Each.
DuPont's Sporting, kegs	$5 50
" " ½ kegs	2 90
" " ¼ kegs	1 60
Dupont's Sm'k'less. 50-lb. drum	22 75
" " 25-lb. kegs	11 30
" " 12½-lb. kegs	5 80
" " 6¼-lb. kegs	2 97
" 1-lb. cans	52

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine 70%
Irwin's 40&10%
Carpenter's Nut 70%
Hollow.
Bonney's—list $30.00 75&5%
Stearns, No. 3 36 00
Post Hole.
Digwell, 8-inch per doz. 12 50
Iwan's Post Hole and Well 40%
Vaughan's, 4 to 9-in., per doz. 6 60
Rafting.
Snell's 50&5%
Ship.
Ford's, with or wi'out screw 40-10%
Snell's " " " 40-5%

AWLS.

Brad.
No. 3 Handled per doz. $0 40
No. 1050 Handled " 90
Shouldered, assorted, 1 to 4, per gro. $1 20
Patent asst'd, 1 to 4 " 85
Harness.
Common " 95
Patent " 90
Peg.
Shouldered " 1 50
Patent " 60
Scratch.
No 1 handled " 4 80
No. 18. socket handled per doz. 1 25
No. 7 Stanley 1 80
Sewing.
Common per gro. 90
Patent " 90

AXES.

Boy's Handled.
Lippincott, 3 lb per doz. $5 00
Marshall Falls City " 5 50
Broad.
Plumbs, West, Pat $33⅓%
" Can. Pat 35%
" Firemen's (handled) per doz $19 00
Plumbs, Miners' (handled) " 9 00
Single Bitted (handled)
Blood's Champion $10 50
Blood's Dull Finished 9 00
Rough Rider 9 00
American 6 50
Perfect Premier, Forest Clipper 10 00
Duquesne 6 00
Single Bitted (without handles)
Blood's Champion $7 90
Blood's Dull Finish 8 00
Rough Rider 7 00
Electric Chopper 8 25
Duquesne 5 50
Crown 6 25
Double Bitted (without handles).
Blood's Champion, 3½ to 4½ lbs. per doz $10 00
Flint Edge " " 9 75
Perfect Premier " " 11 00
The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS. CROW.

Pinch or Wedge Point per cwt. $3 75

BASKETS.

Clothes.

Small Willow	per doz.	$7 00
Medium	"	8 75
Large	"	10 50

Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet. per doz.
No. 13 Tinned Spring Wire $0 90
No. 11 Spring Wire coppered 1 20
No. 10 Preston 1 10

Egg. Per doz.
No. 50 Imp. Dover $0 75
No. 102 " " tinned 85
No. 150 " " hotel 1 50
No. 10 Heavy hotel tinned 2 10
No. 13 " " " 3 30
No. 15 " " " 3 60
No. 18 " " " 4 50

BELLOWS.

Blacksmiths' 65%
Hand.
8-inch per doz. $8 50
10-inch " 10 50
Moulders'.
12-inch " 13 00

BELLS.

Call.
3-inch Nickeled Rotary Bell, Bronzed base per doz. $5 00
Cow.
High Grade 60%
Kentucky 65&10%
Door. Per doz.
New Departure Automatic $6 00
Rotary.
3-in. Old Copper Bell 4 00
3-in. Old Copper Bell, fancy 6 00
3-in. Nickeled Steel Bell 4 50
3½-in. Nickeled Steel Bell 5 00
Hand.
Hand Bells, polished 40&10%
White Metal 40%
Nickel Plated 30%
Swiss 40&33⅓%
Silver Chime 33⅓%
Miscellaneous.
Church and School, steel alloy 50%

Farm, lbs	40	50	75	100
Each	$1.50	2.25	3.38	4.50

BEVELS, TEE

Stanley's, rosewood handle, new list 25%
Stanley's iron handle 25%

BINDING, OILCLOTH.

Zinc	80%
Brass	75%
Brass plated	75&5%

BITS.

Auger.
Extra Double Spur 70&10%
Ford's Car and Machine 40&10%
Ford's Ship 40&10%
Irwin 50%
Russell Jenning's 25&10%
Clark's Expansive 60%
Steer's " Small list, $22.00 25%
" " Large " $26.00 25%
Irwin Car 50%
Ford's Ship Auger pattern Car 40&10%
Center 25%
Countersink.
No. 18 Wheeler's per doz. $1 50
No. 20 " " " 2 25
American Snail head " 1 00
" Rose " " 1 00
" Flat " 80
Mayhew's Flat " 1 10
" Snail " 1 25
Dowell
Russell Jennings 25&10%
Gimlet.
Standard Double Cut 60%
German Pattern per doz. $0 60
German " 65
Gouge " 80
Spoon " 1 00
Countersink " 1 20
Reamer.
Jenning's Square " 2 50
Standard Square " 1 20
German Octagon " 75
Screw Driver.
No. 7 Common " 50
No. 1 Triumph " 1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW

Butchers'.
Standard, ¾ & 1¼-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%

Tackle.
Iron Strapped.....70&10%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%

Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Memphis Globe ..... " 2 75
Crystal Glass..... " 4 00
Brass King..... " 3 75
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 2 20
No. 3, lead..... " 2 75
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ½x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ½x6.....60&10%
Machine, ½x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ½x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%

Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75&10%
Wrought, bronzed.....60%

Flush.
Wrought.....50&10%

Spring.
Wrought .....75&10%
Wrought, heavy.....70&10%

Square.
Cast.....50&10%
Wrought.....75&10%

BORERS.

Angular.
Miller's Falls.....per doz. $13 00

Bung.
Doz.
Enterprise Mfg. Co.'s No 1.....20%
" " " No 2... 20%

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's ..... 50&10%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108..... $3 50
" No. 08..... 2 75
" No. 010..... 3 00

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding 70%

BROILERS.

Wire.....70%
No. Crown, Self-basting, 80doz .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star ..... " 5 00
IXL..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....20%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%
Wrought Brass (New List)....40&10%
Wrought Steel, Bright.....80&10%
Wrought Steel, Japanned.
Nos. 731 and - .....70&10&10%

CALIPERS.

Double..... .35%
Inside and Outside.....35%
Wing.....30%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75

Ice.
Shoenberger..... per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25

Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$17.50 $22.00 $25.00

Gem Pattern.
Nos..... 400 401 402
Gals..... 5 8 10
Per doz.....$17.50 $21.50 $23.50

Omega Pattern.
Nos. ..... E. 2 E. 3
Gals..... 8 10
Per dozen..... $23.50 $26.50

Jersey Pattern.
Nos..... 80 81
Gals..... 8 10
Per doz..... $23.00 $27.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....60%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.00 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$8.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85

Bright Ox Chains.
⅜-in. $7.25; ½-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ¾ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%

Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft.....per doz. $0 75
Heavy Brass, 3 ft .... " 1 00

Pump Chain
Galvanized, per 100 lbs.....$5 50

Safety Chain.
Brass.....60%

Special Steel Loading Chain.
Inch..... ⅜ 7/16 ½
Per 100 lbs.....$16.00 $13.50 $12.50

Stretcher Chains.
7/16-in. $8.50; ⅜-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&5%

Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 35c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School Crayon..... " 10c

CHARCOAL.

In bags..... ..... per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20

Cold.
Good quality, ½ in. and larger.....per lb. .13c
Smaller size per doz.....

Socket, Framing and Firmer.
Clover.....75&10%

Tanged, Firmer.
With handles.....30&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'.
Steel Bar.....25%

Hose.
Sherman's, brass, ¾-in., per doz.. 42c
Double brass, ¾-in., " 90c

Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $8.10.

CLAWS, TACK.

Cast, wood hdle.....per doz.45@60c
Forged steel, wood hdle " $0:80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0 75

Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $6.75 $8.25
Royal.....per doz. 2 25

Butchers.
Plumbs.....25%

CLEVISES

Malleable.....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17

CLOTH

Emery.
Star.....50%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs ..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin..per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 39 89 108
Per
Doz..$.37 .60 1.90 .90 1.15 .80
Nos... 299 320 390 532 620 1400
Per
Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 30c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%

Sash.
Monarch Braided Flax ...per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 25c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....83⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&20%

COUPLINGS, HOSE.

Brass.....per doz. $1 00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3¼c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.0
Slaw and Crout.
3-knife Crout.....per doz. $9 7.
1-knife Slaw..... " 1 6
2-knife Slaw..... " 2 2
Washer..... " 7 7.

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American..... 50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, pain ted...per doz. $7 93
1⅛ in. 4-panel, pain ted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List..60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.35 $0.95
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs, ½ kegs, kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 7
Whisson's Imp..... " 5 2

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 0
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging .....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.90 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
Jack Frost.
Qts..... 2 3 4 6 8 10
Price .$1.00 1.90 2.20 2.80 3.60 4.65

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortiss, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12
A White..... " 15
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 6 8 10
Per doz.....$7.25 9.75 12.00
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 00
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....80&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 50
Pratt's Adjustable, Nos. 1 & 2, per doz..... 4 50
Ives' Adjustable.....per set, 1 35
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....40%
Drifting Pick.....40%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 48
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....60&10%
Matchless.....50&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse Big Twin.....25%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 60
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crescent.....50&10%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " 1 25
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Ltch.. doz. $2.50 3.25 4.25
Hinges only... " 2.00 2.50
Latches only . " .90 .90
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
Banner.....50%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....40%
New Idea.....per gro. $8 00
Oxford.....20%
Wrought Iron.
New Lists .....
Light Strap Hinges.....60%
Heavy Strap Hinges.....60, 10&10%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $4 50
14 to 20 in..... " " 4 25
22 to 36 in..... " " 4 00
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES.

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....60%
Iron.....70%
Awning.....per gro. 80&10%
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 5 7 10 12
Per doz.....$1.90 2.10 2.25 2.65
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle.per doz. $7 00
Chain.
Inch..... 1/4 & 5/16 3/8 7/16 1/2
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned .....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, rivetted, painted red.....per doz. $2 25
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.00 1.70
German.....per doz. 1 75
Gypsy..... " 2 50
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

	Coupled, per ft.
Velvet, 3 ply-¾" guar. press.....	7½c
Eclipse, " " "	8½c
Diamond " " "	10c
Jeanette " " "	13c
Pennsylv'a " " "	16c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B HB E 200
Per doz.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
C.....per doz. $0 40
B..... " 50
A..... " 58
Princess..... " 70
Thelma..... " 1 25
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 3 75
No. 70 Asbestos.....$1 20 net
No. 100 " ..... 1 50 net
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
Tailors' Sad.....per lb. 5½
Tailors' Geese..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton.....each.... 2 00

JACKS.

Locomotive.....70%
Wagon.
Miller 50%
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Maslin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters' 10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Poin'.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 60

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per doz. $6 00
2¾-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices.

LEADERS, CATTLE.

Nos..... 1 2 3
Per doz..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks .....per crate, 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.	$9 00	
Excelsior..... "	2 00	
Handy..... "	2 00	
Little Giant..... "	3 00	
Pony, Pomeroy..... "	7 20	
Washing.		
Winner.....per doz.	54 00	
Keystone..... "	54 00	
U. S. Steel..... "	60 00	
Advance, f.o.b.Chicago "	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $2 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs.....	10	13	16	18
Per doz....	$4.00	4.50	5.25	5.60
'ood face, lbs.....	10	12	14	
Per doz.....	$5.00	5.50	6.00	

'ood Choppers'.
'.ake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
ılva.ized, per doz.	$2.25	3.00	3.85
ıpanned.. "	1.75	2.45	3.15

MICA.

irst Quality.....40&5%
iecond Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....50&5%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1½ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 25
Carload Lots..... 2 15
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf ..... per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin . . ..per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 56
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per doz $1 20
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per doz. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Standard Wrought.....75&5%
Champion.....50%
Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt , without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt.,IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt.,IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn .. 4.00 4.50 5.50 6.00
Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list,50%
B. & A.....50%
Wrapping.
Drab Fiber.....per lb. $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches.....	6	8	10	12
Per doz.....	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 00
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils .....per lb. 7½c
Cut coils..... " 7½c
Stove

Acme—Inches....	5	6	7
Smooth, per jt...	8½c	9½c	10½c
Planished. "	32 c	33 c	43 c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches..	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue...	7	7½	9½	10½
Can't Slip " ..	7½	8½	10	11
Peerless " ..	7½	8½	10	11
Duplex " ..	10	11	13	14
Yale, Rus. Pin....	15	16	17	18
Duplex Planished.	29	31	37	38
Galvanized, Gal.....	15	16	17	18

If wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@½-in., black.....discount, 60%
⅝@½-in., black..... " 60,10&5%
¾-in. to 6-in., black... " 70%
7-in. to 12-in., black... " 62½%
⅛@½-in., galvanized.... " 42%
⅝@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench .....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice .....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%
Gas.—Inches. 7 " 10 12
Per doz.... 3 00 [illegible] 50 [illegible].50 5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common .....60&10&10%
Cook's.....40%
Davis' Iron 25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
White Silk, half pints, per doz. $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro 5 00
Stove.
Black Eagle, 1-lb. cans, pr. gr. $45 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans .... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 6-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy..... each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant ..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in.... " 1 75
Wood Wheel, 6-in., pass knot, ... per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.....	1	2	3	4
Each.....	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each,... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 19
Saddlers'.
Common .. ..per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 35

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½c
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per dos. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Iron—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper.....2½ in.		3in.
Per doz.....	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.....	85	95
Nickel plated.....	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Ring..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling 25%
One Man.....50%
Panel
Brown's 30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's 25%
Disston's 25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....30%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel . . . per doz , 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea..	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.....	1	1½	1¾
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos ..	1	2	3	4	5	6
Per doz.	18c	20c	25c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $6 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 00
Smith & Hemenway.....20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common,
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list . ....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c
Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz .... light, 90c; heavy, $1 35
Torrey's..... .....per doz. $1 35
Warner's No. 11 13
Per doz..... ..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb ...9½@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard .....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille .... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@55
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 00
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $3.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker .... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag..... .each, $2 75
Handy..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood. Ex.
Nos..... 3 2 1 large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.35 6.35 7.00 9.50
Cedar.
Per doz..... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping ... .25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones....25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ½-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in banks 18c
4- " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in banks...37c
Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phœnix..... .....30%
Phœnix Oval Slide,
Inches..... 2½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....20%
Parker's Victor.....20%
Parker's Swivel Base.....20%
Parker's Re-inforced 20%
Parker's X Series.....20%
Parker's Combination 20%
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
No. 310, Keystone..... " 28 00
No. 100, Rival..... " 28 50
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.... . .....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O·G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ½ ⅝ ¾ ⅞ 1 1¼ 1½
10 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—See Machines.

WEDGES.

Axe.....per doz. $0 30
Galling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed. Painted. Galv'd
Carloads .. per 100 lbs. $2.33 $2.63
Less than car " 2.43 2.73
Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Brooms—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%,23⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80%@80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Bemis & Call's:
Adjustable S, 40&5%; Adjustable S Pipe, 40&5%; Briggs Pattern, 40%; Combination Bright, 50%
Steel Handle Nut.....50&5%
Combination Black.....50&5%
Merrick Pattern.....50&5%
Double End Adj. S.....40&5%

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Auld & Conger Co., Cleveland, O
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Iwan Bros., South Bend, Ind
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Majestic Fur. & Fdy. Co., Huntington, Ind

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Wagner, C. DeWitt, Cedar Rapids, Ia

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Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
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Hussey & Co., C. G., Pittsburg, Pa

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New England, Enameling Co., New York, N. Y
Standard Stamping Co., St. Louis, Mo
Star Enameling & Stamping Co., Pittsburg, Pa

Fencing—Wire
American Steel & Wire Co., Chicago, Ill
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Pittsburg Steel Co., Pittsburg, Pa

Files
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Fire Arms
Standard Arms Co., Wilmington, Del

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Warren Mfg. Co., J. D., Chicago, Ill

Flue Stoppers
Stuber & Kuck, Peoria Il

Food Choppers
Enterprise Mfg. Co. of Pa., Philadelphia, Pa

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Niagara Machine & Tool Works, Buffalo, N. Y

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Kruse & Dewenter Co., Indianapolis, Ind
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Berns, Otto, Newark, N. J.
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Galvanized Ware
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Whitacre Mfg. Co., J. E., Rockford, Ill

Gas Stoves
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

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Smith & Hemenway Co., New York, N. Y
Sturges & Burn Mfg. Co., Chicago, Ill
White & Son, Ira F. Newark, N. J

Hardware Delivery Wagons
Sycamore Wagon Wks., Sycamore, Ill

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Hollow Ware
Avery Stamping Co., Cleveland, O
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Ice Cream Freezers
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Stove & Range Co., of Pittsburgh, Pittsburgh, Pa
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Stuber & Kuck, Peoria, Ill

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Nickel Plate Stove Polish Co., Chicago, Ill

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Dixon, Jos. Crucible Co., Jersey City, N.

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U. S. Stove Repair Co., Minneapolis, Minn

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Sperry, D. R. Co., Batavia, Il

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Brauer, A. G., Supply Co., St. Louis, Mo

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Lufkin Rule Co., Saginaw, Mich

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Hooper, C. N., Dubuque, Iow

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Harrington & King Perforating Co., Chicago, Ill

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Meyer Fdy. & Mfg. Co., South Bend, Ind

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Berger Bros. Co., Philadelphia, Pa
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Niagara Machine & Tool Works, Buffalo, N. Y
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Weiss & Co., H., New York, N. Y

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Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware
New England Enameling Co., New York, N. Y

Tinware Trimmings
Berger Bros. Co., Philadelphia, P

Toasters
Kinne Mfg. Co., Minneapolis, Minn

Tools, etc.
North Bros. Mfg. Co., Philadelphia, Pa
Simmons Hardware Co., St. Louis, Mo
Stanley Rule & Level Co., New Britain, Conn

Tools—See Carpenters' Tools
Tools—Linemen's
Smith & Hemenway Co., New York, N. Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Heavy Tin
Dieckmann, Ferdinand, Cincinnati, O

Ventilators—Wooden
Wooden Ventilator Co., The, East Palestine, O

Ventilators
Burt Mfg. Co., Akron, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt Co., Chicago, Ill
Globe Ventilator Co., Troy, N. Y
Iwan Mfg. Co., South Bend, Ind
Merchant & Evans Co., Philadelphia, Pa
Milwaukee Corrugating Co., Milwaukee, Wis
Powers & Williams, Streator, Il

Wagons
Sycamore Wagon Wks., Sycamore, I

Washers
Columbus Bolt Works, Columbus, O

Washing Machines
Knoll, Jas. H., Reading, Pa
White Lily Mfg. Co., Davenport, Ia

Wire
American Steel & Wire Co., Chicago, Ill
National Wire Cloth Co., Niles, Mich.

Wire Goods
Bromwell Brush & Wire Goods Co., Cincinnati, O
Denning Wire & Fence Co., Cedar Rapids, Ia
National Wire Cloth Co., Niles Mich
Pittsburg Steel Co., Pittsburgh, Pa

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, business for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS OFFICIAL copy "PATENT LAWS" United States sent on receipt ten cents stamps.
HUBERT E. PECK, Patent Attorney, 629 F Street, Washington, D. C.

For Sale—Stock of hardware, stoves, linware, tin shop tools, stock and plumbing goods valued at about $3,000 in northern part of Illinois. Good farming and dairy country. Rent reasonable. Address S-33, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

For Sale—Tinshop, roofing, furnace and torpedo sheet shop in south eastern Illinois, in the center of the Illinois oil belt. Death of owner reason for selling. Address Scott Mfg. Co., Robinson, Illinois. 26-3t

For Sale—Good clean $6,000 stock of hardware and furniture. Must have cash. Doing good business. Address H. D. Mohr, Akron, Iowa. 26-3t

For Sale—$7,000 stock of hardware; only hardware stock in a town of over 1,000. Doing good business; good opportunity. Address S-31, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 5-3t

For Sale—Up-to-date hardware; about $5,000; well assorted; will sell at a bargain. Also store building; good rooms above, and lot 22x140. Best location in town. Snap at $2,000. Part time on building and lot if wanted. This will bear close investigation. Annual sales $15,000; good town and country. Good prices and honorable competition: No trade considered. Address S-23, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—$900 worth of stock in a furnace company. Will sell at a bargain. Address J. T. O'Hara, 2099 Jackson St., Chicago, Illinois. 25-3t

For Sale—Old established hardware business, making money in central Wisconsin. Population of town, 1,000; stock, $7,500; large territory. Can rent building. Only two hardware stores in town. Plenty of work at good prices. Bargain for some one. Reason for selling, going west. Address S-25, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—Fine new stock of tinner's tools, hardware, stoves, and granite ware. Invoice about $2,500. 100 miles north of Chicago. Will sell the hardware without the tools if desired. Will discount 10% for cash deal. Cash deal only. Now is your chance to get a bargain. Address S-26, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-2t

For Sale—In Eastern Ohio town of 2,300, tinner's and slater's tools and stock. Four and five men working. Would sell half interest. If it is business you want, here it is. Address S-27, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—Clean stock of hardware, tin and plumbing shop, in good clean town of 1,600 inhabitants and excellent farming country in East-Central Iowa. Old established business. Cause of selling, death of senior member of firm and must settle estate. Address S-28, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

For Sale—The choicest proposition in hardware, tinning, plumbing, etc., to be found in the state of Iowa. A clean, up-to-date stock of general shelf hardware, stoves, etc. Store well located, building leased at very reasonable rent. Stock, tools and fixtures will inventory $12,000. Good chance desiring A-1 location. Address S-16, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

For Sale—Tin and pump shop in good part of Kansas and good business. Address Ward H. Parker, Fairview, Kansas. 25-3t

For Sale—Well established tin, jobbing and furnace shop. Employ two to six men. Will invoice about $800. Is first-class opening for tinner. Have run shop nine years. Reason for selling is failing health. Address T. R. Freeman, 229 S. Main Ave., Sioux Falls, South Dakota. 25-3t

TINNER'S TOOLS.

For Sale—1 No. 3 V. & O. Inclinable open back power press, weight complete, 2,750 lbs. Used sixty days; good as new. Address Barrett Hardware Co., Joliet, Illinois. 25-3t

For Sale—Full set of tinners' tools, all in good shape, with shop. Stock, if the right man will open up a job shop. Good opening for the right man, for tinning, furnace work, steam, hot water jobs, and plumbing. For information address S-21, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

HELP WANTED.

Wanted—Good tinner and plumber. Must be sober and reliable. Address M. Armbruster, Eagle Grove, Iowa. 26-3t

Wanted—Tinner and plumber. In town of 800. Must be good all around man able to do furnace work, also clerk in store. We will give steady work. State wages and send references in first letter. No boozer wanted. Address Abbott Bros., Sargent, Nebraska. 26-3t

Wanted—Tinner and furnace man. Address Vollersen & Co., Battle Creek, Iowa. 26-3t

Wanted—Tinners, cornice makers, furnace men. First-class wages. Eight hours, open shop. Apply George Schmitt, Room 213, Continental Bldg., Denver, Colorado. 26-1t

Wanted—Experienced clerk for hardware store. Give references. Address S-32, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

Wanted—Good tinner in town of 800; one who can do some plumbing and furnace work, and sometimes look after stoves and clerk in store evenings. Must be sober, honest, reliable and reason for change. Married man preferred. Wages $60, with prospects of a raise for a hustler, or perhaps an interest. Address for a pleasant job, Lock Box 315, Alden, Minnesota. 26-3t

Wanted—Good tinner, one used to hot water heating and pipe work. State wages and interesting facts in first letter. No boozer wanted. Address H. A. Lee, Canton, South Dakota. 26-3t

Wanted—First-class plumber who can do ordinary tin work, such as spouting, roofing, etc. Steady position at good wages to the right man. References required. Please state full particulars in first letter. Address The Gray Hardware & Implement Co., St. John, Kansas. 26-1t

Wanted—Two specialty salesmen to carry five strong lines on commission. Illinois territory. Address S-34, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill.

Wanted, Tinner—At once, for general outside work. Address L. J. Gasser, Jasper, Indiana. 26-3t

Wanted—An A-1 competent hardware salesman. Must have 10 years' experience and furnish the best of references and be able to manage good live store in the absence of owner. Address H. C. Wittman, Lincoln, Nebraska. 26-ufn

Wanted Partner—To take an interest in hardware, furniture and implement business in a first-class farming community in Central Minnesota. Address S-17, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Wanted—By Minnesota hardware jobbing house, traveling salesman for Montana. Must be over thirty years old. Thoroughly posted in general hardware, tinware, guns, ammunition, cutlery, etc. Good salary to the man who can sell the goods. Address S-29, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-2t

Wanted — First-class tinner's foreman in sheet metal works, including heating, ventilating, cornice and skylight work. One competent to estimate, draft and detail work. Address S-30, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 25-3t

Wanted, Tinner and Slater — Steady work and good wages to first-class mechanic. Address T. H. Norr, Piqua, Ohio. 25-3t

Wanted—Strictly first-class tinner and plumber. Must be strictly sober and honest. Apply at once. Address Spradling & Flagg, Hoopeston, Illinois. 25-3t

Wanted, Plumber and Steam Fitter—The right man can have work by the year at good salary. Address Garmen & Forkenbrock, New Hampton, Iowa. 25-3t

Wanted—Pump and wind mill man who can do pipe work, hang eave trough and do some tin work. State wages and give reference. Must be sober and reliable. Address Joseph Wiloth, Marble Rock, Iowa. 25-3t

Wanted—A-1 tinner who can do some plumbing. No boozer or loafer need apply. State wages wanted in first letter. Address W. B. Hayden & Son, Cassopolis, Michigan. 25-2t

Wanted—Good tinner, plumber, pump and wind mill man. The right man can have good wages and work by the year as long as he wants to. Town of 1,000 population and good place to save money. Answer stating wages, age, etc. Address Schilling Bros., State Center, Iowa. 24-3t

Wanted—First-class tinner at once. Steady work. State wages and experience in first letter. Address Hastings Sheet Metal Works, Hastings, Nebraska. 25-3t

Wanted, Good Tinner—To do such work as generally comes to country shop. One preferred who can do pipe work and plumbing. Steady work the year around in nice city of 3,000 people. Married man preferred. State wages and ability in first letter. Will not keep a drinker. Address Fred L. Parish, Waupaca, Wisconsin. 25-3t

Wanted—Five first-class tinners. Must be first-class on tinning, furnace and slate roofing. Steady employment. Also one first-class tinner and plumber. Address Macomb Sheet Metal Works, Macomb, Illinois. 25-3t

Wanted—Good all around tinner and furnace man. Inside and outside work. Wages $18 per week and job year around to steady man. Give references. Address O'Brien Bros., Devils Lake, North Dakota. 25-3t

Wanted First-Class Tinner—For job shop. Must be all around man on tinning and furnace work. Address J. C. Zinser Hardware Co., Joliet, Illinois. 24-3t

Wanted—Experienced hardware clerk, who can keep books. Must speak German. State wages wanted. Address Stoelting Bros. Co., Kiel, Wisconsin. 24-3t

Wanted—Good tinner at once. One with some experience in plumbing preferred. Steady job the year around. State references and wages required. Address Bishop & Withrow, Central City, Nebraska. 24-2t

Wanted Foremen—Men with experience at handling power machinery for manufacturing tin and sheet metal ware. Address Superintendent, Flat 3, 183 14th St., Milwaukee, Wisconsin. 24-3t

Help Wanted—Good sheet metal factory worker and one good, all around tinner and cornice worker. Address C. M. & M. Works, 103 17th St., Rock Island, Illinois. 24-3t

Tinner Wanted—In country town, some furnace work, pipe and pump work. Steady job, also waiting on trade in store. Must be honest and sober. State wages. Address E. Doss, Philo, Illinois. 24-3t

SITUATIONS WANTED.

Situation Wanted—General hardware man doing tinning, furnace and hot water heating, some plumbing. Iowa or Illinois preferred. Wages $75 to $85 per month. No dull seasons where I work. Address S-31, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-3t

Situation Wanted—Hardware clerk, with eight years' experience in hardware, stoves and tinware departments; can do roofing, guttering, spouting and pump work. Best of references furnished. Married. Age 27. Strictly reliable. Address S-19, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

Wanted Position—As clerk in hardware store. Three years' experience. Well posted on hardware in general. Good references. North Dakota or Montana preferred. Address S-18, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 24-3t

SPECIAL NOTICES.

RECEIVER'S SALE.

I will offer for sale at No. 11 E. Main St., Valparaiso, Indiana, on July 7th at 1 P. M. a live and going hardware, tinning and plumbing business at one-half cash, balance 90 days time with interest and approved security. Address James B. Dilley, Receiver, Valparaiso, Indiana. 26-1t

"SATISFIED AND WANT MORE"

—is the experience of the J. P. Lewis Company, Beaver Falls, N. Y., who say that "all the Burts we have are giving entire satisfaction. Please send us the price of five more 30 inch

BURT COMBINATION SKYLIGHT VENTILATORS

Wherever ventilation is required Burt's will do the work more efficiently than any other ventilator made. They are made from the best material and workmanship, and also made with glass or metal top, as desired. Each ventilator is fitted with our patented sliding sleeve damper, which is storm and dust proof, and which may be closed without shutting out the light.

New 96 page catalogue, showing fine illustrations of mills, factories, shops, foundries and residences where Burt ventilators are in successful use will be sent if you write for it.

THE BURT MFG. CO., 650 Main Street, AKRON, OHIO

The Largest Manufacturers of Oil Filters and Exhaust Heads in the World.

GEO. W. REED & CO., Montreal, Sole Manufacturers of "Burt" Ventilators for Canada.

Glass Top Burt Ventilators are also made up to and including the 72-inch size.
Metal Tops Furnished if Desired
Notice Sliding Sleeve Damper. (Patented)

SPECIAL NOTICES.

WORKING FOREMAN WANTED

Inside or out. One who understands all kinds of roofing, and cornice work and can do drafting. Address Gateway City Steel Tank & Roofing Co., La Crosse, Wisconsin. 26-1t

TIN SHOP FOR SALE

Good location, fair sized town, within 40 miles of Chicago. Address W-24 care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 26-1t

WANTED

Salesman visiting stove and hardware trade to handle household specialty as a side line; extensively advertised in largest magazines; easy seller; immense sales; big profits. In writing state line you are selling and territory you cover. Address C. E. Swartzbaugh, 1340 W. Bancroft St., Toledo, O. 24-4t

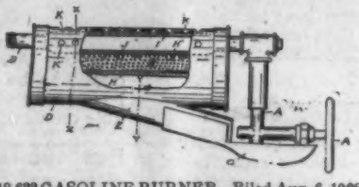
HERE'S YOUR CHANCE

To buy a good up-to-date Warm Air Furnace business commanding the best class of trade in one of the largest cities in Ohio. This is no dead game, but owners are otherwise engaged. A fine chance for a couple of energetic men. Address with full particulars, W-24, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 25-ufn

WANTED

A lecturer to address local meetings of the National Association of Master Sheet Metal Workers and other bodies on the merits of warm air furnace heating and ventilating and on high grade furnace installation. Attractive terms to the right man. Must be an intelligent and enthusiastic believer in the merits of warm air furnace heating. Applicants should state experience and age; and should describe qualifications. All applications will be held in strictest confidence. Address, Federal Furnace League, Wilson Ferguson, Sec'y, No. 435 Mint Arcade, Philadelphia, Pa. 25-2t

PATENT FOR SALE



918,622 GASOLINE BURNER. Filed Aug. 6, 1908. Serial No 447,220. Will sell on royalty or outright to responsible manufacturer. It is a powerful heater and can be used for heating purposes, for gasoline, wood or coal stoves, heating water, soldering irons, etc. Address for full particulars, WM. T. WHELAN, 1001 South 10th Street, St. Joseph, Mo.

FOR SALE OR EXCHANGE

Complete sets of patterns for three sizes of furnace. Burns soft coal without smoke or soot. Covered by letters patent. For hot air or in combination with hot water. A powerful and economical heater, possessing more points to commend it than any other furnace on the market. Will take real estate or stock in a good manufacturing company. Address W-23, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 25-2t

MODERN STOVE PLANT FOR SALE

Favorably located in a prosperous city in the Central States. Brick saw-tooth roof foundry, sheet steel shops, plating plant, mounting rooms and warehouses. Each equipped with new modern machinery and independent electric motors throughout. Complete line of up-to-date patterns for medium-priced cast and steel coal and gas stoves and ranges. Ample sidings and ground. Product well and favorably known. An unusual opportunity. Address Stove Plant care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 26-2t

"Dime" Screen Door Check

Stops the slamming of the **Screen Door**

Sold at all Hardware Stores.

Send for circular and ask for prices.

By mail, 12 cts.

CALDWELL MFG. COMPANY
41 Jones St., Rochester, N. Y.

Salesmen Wanted

The Martin Manufacturing Co. of Mason City, Iowa, makers of the very highest classes of sheet metal goods, consisting of a complete line of tin ware, galvanized iron ware, copper nickel plated ware, and three colors in enamel steel ware, have an opening for a few first class experienced tin and enamel ware salesmen. This is a splendid opportunity for a salesman who has the ability to secure a good position. Address all orders or communications to Martin Manufacturing Company, Mason City, Iowa. 23-ufn

Are You Looking for a Business Opening?

I know of a few splendid locations for new retail stores—and I know something about a retail line that will pay large profits on a comparatively small investment. Write me to-day for full particulars. Edward B. Moon, 13 W. Randolph St,, Chicago

The expense and annoyance of painting will not recur every year or two if you use

DIXON'S SILICA-GRAPHITE PAINT

the "Proven Shield for Steel Work." Durability records in all climates; write for a few

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

Every Retailer

should secure a copy of

THE AMERICAN ARTISAN ADVERTISING MANUAL

Experts agree that it is a book of inestimable value to those who wish to prepare advertisements that will bring results.

Read their opinions as given below:

From "DOMESTIC ENGINEERING," Chicago

"The book is of undoubted worth as an aid to the retail merchant in preparing that desirable but illusive style of advertising copy known as "printed persuasion."

From "NATIONAL HARNESS REVIEW," Chicago.

"Its pages teem with salient points concerning texts, typographical displays and other essentials which go into the make-up of a business getting announcement."

From "PRESTO," Chicago.

"It would be impossible to estimate the value of the book to hardware merchants."

From "TRADE," Detroit, Mich.

"This book is thoroughly practical."

From "THE BUFFALO EXPRESS," Buffalo, N. Y.

"It contains many reproductions of successful advertisements."

From "THE WEEKLY IMPLEMENT TRADE JOURNAL," Kansas City, Mo.

"It is a reproduction of the retailers advertisements and criticisms of same."

From "FARM IMPLEMENT NEWS," Chicago.

"It is a compilation of all kinds of display advertisements as they actually appeared in different newspapers."

From "THE HOUSE FURNISHING REVIEW," New York.

"This book is useful to the ad man."

From F. R. SWITZER CO., "SUCCESSFUL ADVERTISING," Utica, N. Y.

"We have glanced through THE AMERICAN ARTISAN ADVERTISING MANUAL, and it certainly ought to be of considerable interest to the retail hardware trade, and we think you deserve considerable credit for the undertaking."

From "THE THRESHERMEN'S REVIEW," St. Joseph, Mich.

"A very effective monitor of retail advertising." "It should be a very valuable book for the dealer who wants newest ideas and best methods of expression in ad writing."

From "HARDWARE," New York.

"The book is a practical help for hardware dealers."

From "STOVES AND HARDWARE REPORTER," St. Louis, Mo.

"A fund of information on the subject of advertising calculated to enable the retail dealers to obtain the best results from newspaper advertising."

From "THE METAL WORKER," New York.

"THE ADVERTISING MANUAL will be found of assistance to stove dealers, sheet metal workers, plumbers, hardwase men and all who seek to extend their business by advertising."

From "THE TRADESMEN," Chattanooga, Tenn.

"If the average hardware or stove dealer, to whom this book should prove of especial benefit, had some assistance in the preparation of his advertising copy, he would be able to prepare advertisements at all times that would be of the business getting kind."

It should have a place in every store.

Improve your advertising, Mr. Dealer. THE AMERICAN ARTISAN ADVERTISING MANUAL will aid you. Secure a copy to-day.

The book retails at $3.50, and it can be obtained from your bookseller or from

DANIEL STERN

PUBLISHER

355 Dearborn Street, Chicago

THE RIGHT KIND
of Oven Thermometer is

THE "ACME"

THE "ACME"

MADE BY EVANS STAMPING AND PLATING COMPANY TAUNTON, MASS.
Western Agent, C. H. MATTHEWS, Detroit, Mich.

We have been manufacturing
"Everything you need in your foundry"
Since 1874
Get our 400 page catalog No. 40A
The S. Obermayer Co.
CINCINNATI
CHICAGO
PITTSBURGH

Stove Repairs
AND STOVE DEALERS' SUPPLIES
From "BRAUER'S"
Prices are Lowest Treatment is best
Shipments are Promptest
A. G. Brauer Supply Co.
316-318 N. THIRD ST. ST. LOUIS, MO.

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

REPAIRS
TO FIT ALL STOVES AND FURNACES
PROMPT SHIPMENTS ASK FOR ORDER BLANKS
U. S. STOVE REPAIR COMPANY
13-15 South Third St., Minneapolis, Minn.

PATTERNS
For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N.Y.
Established 1855

PEERLESS ENAMEL
ASK YOUR JOBBER
GLOSS BLACK FOR STOVE PIPES AND ALL IRON WORK
ALUMINUM FOR RADIATORS PIPES, ETC.
WRITE FOR SAMPLE
NICKEL PLATE STOVE POLISH CO., MFRS.
CHICAGO

PATTERNS
For Stoves and Heaters
The Cleveland Castings Pattern Co.
CLEVELAND, OHIO

WELLER PATTERN CO
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

Sperry's
Steam Kettles
Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

D. R. Sperry & Co., Hollow-ware Founders Batavia, Ill.

THE Geo. W. Cope STOVE PATTERN WORKS Cor. Brush and Woodbridge Streets
DETROIT MICHIGAN

C. N. HOOPER, Dubuque, Ia.
Vitreous Enameling
TECHNOLOGIST
Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

THAT PAPER IS THE CHEAPEST WHICH BRINGS THE BEST RESULTS IN PROPORTION TO ITS RATE, NO MATTER WHAT THAT RATE MAY BE.

WE ARE PLEASED TO ANNOUNCE

that we are now ready to furnish our full line of

METAL CEILINGS

in **our new construction,** having **punched nail holes,** and **re-pressed beads,** reducing the cost of erection fully one-half, and giving an **invisible joint.**

Send for Catalogue and full Information.

CANTON ART METAL CO.

CANTON, OHIO

BRANCHES:

NEW YORK CITY
The Canton Steel Ceiling Co.
525 West 23d St.

MINNEAPOLIS, MINN.
The Canton Steel Ceiling Co.
206 South Third St.

Wheeling Corrugating Company

Wheeling Steel Baskets and Dry Measures have proven their economy.

Ripening Crops will strengthen the market for such products.

Made of heavy sheet iron properly Galvanized or Japanned. They are durable and will stand hard service better than any other kind, and the cost is low.

Baskets are made in ½, 1 and 1½ bushel sizes. Measures are made in 1 quart to ½ bushel sizes.

Absolutely guaranteed as to material, workmanship and capacity.

For further information and attractive prices, write to

WHEELING CORRUGATING COMPANY

WHEELING, W. VA.

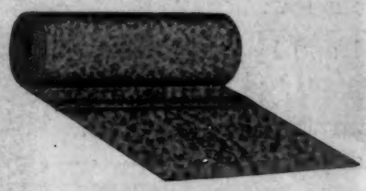
BRANCH OFFICES AND WAREHOUSES:-

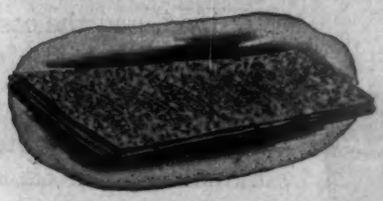
Chicago, Ill. **Boston, Mass.** **Chattanooga, Tenn.**
St. Louis, Mo. **Philadelphia, Pa.** **New York City, N. Y.**

TONCAN METAL

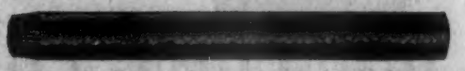
SHEETS AND FORMED PRODUCTS

Rust-Resisting
Moderate Cost
Durable
Economical





Roofing
Eaves Trough
Conductor Pipe
Etc.



Ask for prices and particulars.

W. C. HOPSON & CO.

GRAND RAPIDS. - - MICHIGAN.

GRIFFITHS GENUINE CHARCOAL IRON ROOFING PLATES
GRIFFITHS GENUINE GALVANIZED SHEETS

KNOBBLING FIRE

The same base material that was made thirty years ago. Nothing but Charcoal Iron rolled into Tin Plate and Sheet Iron at the

GRIFFITHS CHARCOAL IRON MILLS

Knobbling fires, hammers, bar mill and finishing mills at

WASHINGTON, PA.

AMERICAN BESSEMER | BLUE ANNEALED | APOLLO GALVANIZED

SHEET STEEL

We can furnish promptly Corrugated Iron and Steel Sheets, Painted and Galvanized

TRY US ASSORTMENT COMPLETE PRICES LOW

THE BASSETT-PRESLEY COMPANY
CLEVELAND, OHIO

"TITELOCK"

PAINTED TIN SHINGLES ARE SUPERIOR TO WOOD
GALVANIZED SHINGLES ARE SUPERIOR TO SLATE
COPPER SHINGLES ARE SUPERIOR TO TILE

SEND FOR SAMPLES AND BOOKLET

MILWAUKEE CORRUGATING CO.

MILWAUKEE, WIS. CHICAGO, 89 EAST LAKE ST. KANSAS CITY, MO.

LIGHTNING FIRE AND WATER PROOF

SIX STANDARD PRODUCTS

USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS

W. Dewees Wood Company's Patent Planished Iron.
Wood's Cleaned Refined Smooth Finish.
Hammered Polished Steel.
Wood's Oak Stove Body.
Wellsville Polished
Range Steel.

MANUFACTURED BY

AMERICAN SHEET AND TIN PLATE COMPANY

FRICK BUILDING PITTSBURG, PA.

EXTRA SOFT
INLAND
OPEN HEARTH

INLAND STEEL CO.
CHICAGO

Pure Open Hearth Sheet Steel

Galvanized—Perfectly coated—will not peel.

Black—Blue Annealed and Box Annealed.

Roofing—Painted and Galvanized—all kinds.

Use this brand and you will continue to do so.

Write for Catalogue.

Manufacturers of

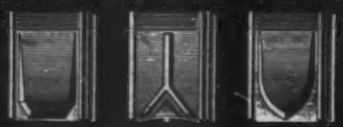
Steel Ceilings and Side Walls, Cornices, Skylights and Fireproof Windows. Roofing

Eastlake Metal Shingles
Prepared Asphalt Roofings

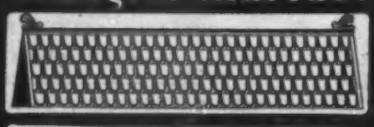
Send for Catalogue

The W. J. BURTON COMPANY, Detroit, Mich.

WALTERS'



Shingles that last



Made from Galvanized Tin and Painted Tin
Storm, Rust and Fire Proof
Do you want to increase your business? This is your opportunity. Write for catalogue, samples and prices.

National Sheet Metal Roofing Co.
JERSEY CITY, N. J.

C. G. HUSSEY & COMPANY
PITTSBURGH, PENNA.

Manufacturers of

Soft Copper, Copper Gaskets, Copper Bottoms, Soldering Irons, Copper Nails and Tacks, Tinned Copper, Polished Copper, Cold Rolled Copper. Special Shapes Sheared or Stamped Slating Nails,

PROMPT SHIPMENT FROM STOCK.

One Piece of Metal. Any Desired Angle.
Save Expense in Erecting.

Dieckmann's Conductor Elbows

GUARANTEE *F. Dieckmann* **Stamped in the Metal.**

Galvanized Steel, Charcoal Iron, Copper, Ingot Iron, Terne, Brass, Zinc.

THE FERDINAND DIECKMANN CO.
STATION B. CINCINNATI, OHIO.

PATENTED

Just Out
Our New Ceiling Catalogue No. 28
Sent on Application to the Trade. Write Today.

FRIEDLEY-VOSHARDT COMPANY.
194-204 Mather Street, CHICAGO, ILL.

METAL CEILINGS
WITH
PUNCHED NAIL HOLES
SAVE
TIME AND TROUBLE
Particulars on request

The Canton Art Metal Co.
Canton, Ohio

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525 West 23rd Street
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Gerock Bros. Mfg. Co.

Sheet Metal Ornaments and Statuary

Detail Work a Specialty
Ask for Catalogue

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THE AMERICAN ARTISAN AND HARDWARE RECORD
DANIEL STERN, Publisher and Proprietor,
355 Dearborn Street, CHICAGO.

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

Name.....

Address.....

Town..... State.....

ROOFING SLATE

All Grades Manufactured and Sold by
THE AULD & CONGER CO.
999 Prospect Street
CLEVELAND, OHIO
Roofers' Supplies, Tools, Lightning Slate Dresser.
We Mine Our Own Slate

Standard Metal Shingles

The Canton Ventilator

Made with Metal and Glass Tops and with and without Automatic closing device.

THE CANTON MFG. CO.
CANTON, OHIO
Makers of
Cornice, Skylights, Metal Ceilings, Eaves Trough, Conducter Pipe, Etc.

The Powers AUTOMATIC Chimney Top

Iron mountings only or complete with cover and vane.

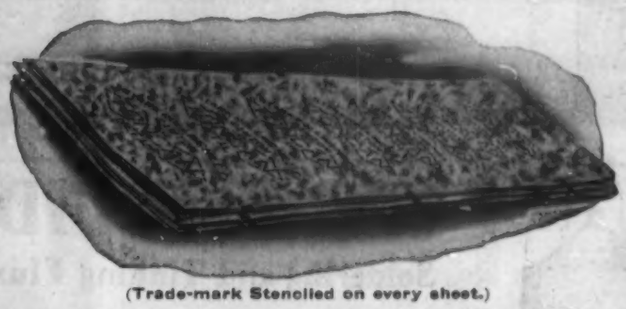
Double the sale and triple the efficiency of smoke stacks.

Powers & Williams
Streator, Ill.

Ask us for prices on skylight glass and metallic skylights.

TONCAN METAL

SHEETS Black or Galvanized



(Trade-mark Stenciled on every sheet.)

WHAT TONCAN METAL means to you.

First, it means more lasting Sheet Metal Work. Possibly at first glance that doesn't look like an advantage to the sheet metal worker but it is. A job which doesn't last as long as it should doesn't help your business a little bit; on the contrary if it takes two roofs to last as long as one roof should, the chances are the second roof **won't** be a **sheet metal one,** and that the sheet metal man loses a good customer and all that customer's work. TONCAN METAL benefits both Consumer and Sheet Metal Man. The Consumer gets more service for his money and the improved results create confidence which leads to an increased demand for sheet metal work generally.

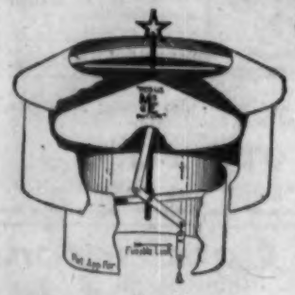
If you have not had particulars of this remarkably durable, rust-resisting product,—TONCAN METAL,—you will be interested in getting them.

Write for them today.

PRICES FROM YOUR JOBBER,
or,

THE STARK ROLLING MILL CO.

CANTON, OHIO



The "STAR" VENTILATOR

AND

The FIRE RETARDING "STAR" VENTILATOR and DAMPER COMBINED

Embody everything in the Best Scientific Storm Proof Ventilator.

MERCHANT'S METAL "SPANISH" TILES and "GOTHIC" SHINGLES.

These Tiles and Shingles have proved meritorious for years. They are in demand where ornamentation is essential. Also Lightness and Durability are special features of merit.

Write for Booklets.

*Reg. in U. S. Pat. Off.

Merchant & Evans Co.

Sole Manufacturers

KANSAS CITY CHICAGO
PHILADELPHIA NEW YORK BROOKLYN BALTIMORE DENVER

Makers of LOCK JOINT METAL SHINGLES. Will not only save money, but secure the best Metal Shingle on the market. Write for prices and get our samples.

ELLER MFG. CO. - - CANTON, OHIO

NEW YORK OFFICE AND WAREHOUSE, 29-31 Lexington Ave.

Why waste your time and money trying to use other makes? The No. 1 Fire Pot will make and save you money. You can do more and better work in less time, at nearly one-half the cost in fuel required by other makes. Don't you see what a saving that is? Ask any mechanic that has used our Fire Pots, and invariably he will say, "The No. 1 is all right, and it has no equal." Try one, you will be pleased.

Jobbers will supply you at factory price, or we will ship direct if cash accompanies the order.

No. 1 Fire Pot $6 Net.

CLAYTON & LAMBERT MFG. CO.,

Detroit, Mich., U. S. A.

RUBY FLUID

Soldering and Tinning Flux

It is anti-rusting, non-corrosive, non-poisonous and non-explosive, not affected by age, change of temperature, or exposure in open vessels. It is a perfect flux for GALVANIZED and ALL other metals. Shipped in tin cans, ready for use. On approval. Ask for booklet.

The Ruby Chemical Co., Johnstown, Ohio, U. S. A.

Chas. M. Hoover, Sales Mgr., 54 North Clark St., Chicago.

Time and Money

are both saved when you use the most practical and the most modern soldering furnace on the market—the one that *heats the irons as fast as you want them—the*

Lundy

Double Blast

This furnace is guaranteed to use less gasoline than any soldering furnace on earth.

None of the Heat Is Wasted

Write for our Special Introductory Offer.

Meyer Foundry & Furnace Co.

SOUTH BEND, INDIANA

8 ft. Brake for 18 Gauge and Lighter.

Steel Brakes

We manufacture a complete line of hand and power brakes from 3 to 16 ft. in length, to bend up to ¼ in. plate. Just out, our new catalogue.

Write for it.

DREIS & KRUMP Mfg. CO.

Halsted and 32d Sts. CHICAGO

"Always Reliable"

OUR No. 21 TORCH BEST IN THE MARKET

This Torch is far superior to any other torch with pump in body; having in addition to the regular automatic cork check a positive shut off by screwing down pump plunger, which closes the needle valve in bottom of pump.

Packed one in wooden box, properly labeled. Write for our catalog No. 10 on furnace and torch, also catalog No. 5 on plumbers' tools, etc.

Pat. applied for.

OTTO BERNZ

21-45 So. 15th St. NEWARK, N. J.

EARL'S IMPROVED REVOLVING VENTILATOR

Runs in a self-lubricating bearing that is not affected by heat or cold, and never requires any oil or grease. The Fan revolves without any noise, producing a current of air upward, which positively prevents any down draft.

Write for circular.

BERGER BROS. COMPANY

TIN PLATE, SHEET IRON, Etc.

Warerooms and Factory:

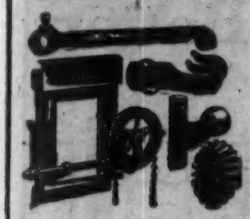
100-114 Broad St., PHILADELPHIA, PA.

Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.

SKYLIGHT GEARING AND Chain Lifts



Tinsmiths, Plumbers, Cornice Makers and Coppersmiths

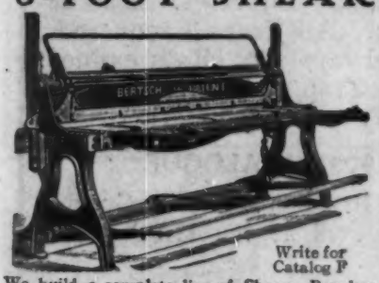
TOOLS

Pipe Threading Machines

Second Hand Goods Bought and Sold

H. WEISS & COMPANY
30 Cliff Street, NEW YORK

8-FOOT SHEAR



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We build a complete line of Shears, Punches, and Forming Rolls for either hand or belt power.
Bertsch & Co., Cambridge City, Ind.

PUNCH, SHEAR & BENDER

The Victor

Most practical for sheet metal workers, tinners, plumbers, hardware stores, blacksmiths, carriage builders, etc. Write for Bulletin No. 16.

NAPPANEE IRON WORKS, NAPPANEE, IND.

Collar Edging Rolls

Deep bead. Positively guaranteed not to cut the metal. Very rapid. No experience required.

Send for circular.

C. DeWITT WAGNER,
Cedar Rapids, Iowa.

Bishop's Quick Working Forms

for closing end of Eave Trough in corrugations, as shown herewith.

You can close an end much quicker, neater and cheaper than in any other way. When you cut a trough, you can put an end in both parts, thus making no waste.

The frost will not burst the end out. You can close old work from a ladder.

The form is made in five sizes, 3½, 4, 4½, 5 and 6. For sale by jobbers or tinning specialty houses.

BISHOP HARDWARE COMPANY,
Dowagiac, Michigan.

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS

OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

No. 212 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

How to be Successful.

To be a SUCCESSFUL PATTERN CUTTER it is necessary to keep abreast with the times, as it is the up-to-date mechanics that receive the best positions and highest salaries. And to be up-to-date means to study thoroughly all the new developments in his trade, AND BE ABLE TO APPLY THEM.

Are You Interested in Pattern Drafting?

If so, send four cents in postage for circular giving full information concerning this school, also sample drawings. Enroll early for Fall and Winter study.

GRAY'S SCHOOL OF S. M. PATTERN DRAFTING,
1028 Jackson Avenue, New York City.

Superior Setting Down Machine.

Tools for Sheet Metals

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

Niagara Machine & Tool Works,
BUFFALO, N. Y.

MARVEL

Patent applied for.

PORTABLE PUNCH No. 20

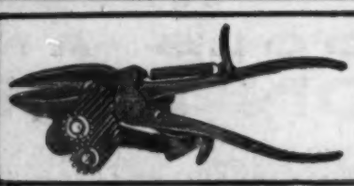
Made entirely of STEEL

Punches ½ in. hole in ¼ in. and equivalent

Let us send you one on trial.

Write for circular and price of this and other Marvel Punches and Shears.

ARMSTRONG-BLUM MFG. CO.
106 N. Francisco Ave., Chicago, Ill.



Combination Pipe Fitter

A Complete Outfit for Working Sheet Metal Pipes.

Cuts Stove, Heater and Ladle Pipes at any angle. Will also do the Crimping. Write for Circulars and Prices.

BLUMER-DOSCHER MFG., CO.
408 Crescent St., - Brooklyn, N. Y.

HENRY CHAFFEE, AMBRIA, IND., WRITES:

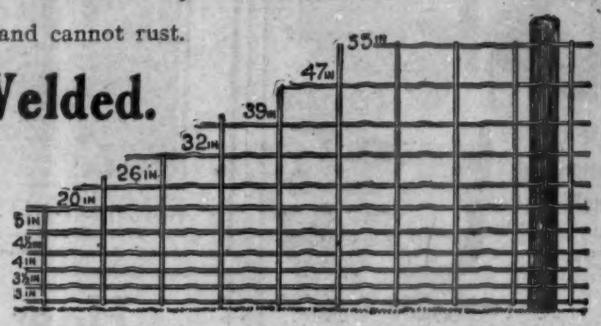
"Please take my ad. out of THE AMERICAN ARTISAN. I got two or three letters daily and have something like twenty jobs in view."

"Pittsburgh Perfect" Fence is Better

It is the strongest and most satisfactory on the market.

It has no wraps or clamps to hold moisture and cannot rust.

It is Electrically Welded.



It will curb the strongest beast.

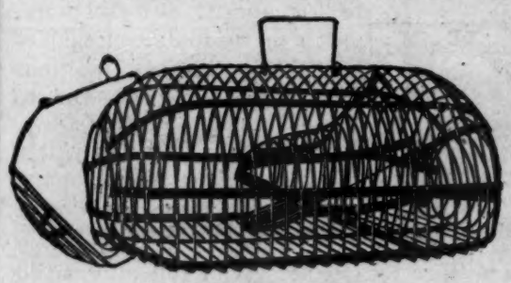
It can be adjusted to uneven ground.

It has more selling points than any other fence.

WRITE FOR FURTHER DESCRIPTIVE MATTER.

PITTSBURGH STEEL CO., Pittsburgh, Pa.

We Make More Rat Traps Than Any Other Makers in the World.



ALL LOCKED RIBBED

Five Sizes. Steel Wire and Ribs. Patent Flange, Safety Doors. All Traps Lacquered. Rust Proof. Traps always set. Rats cannot escape when in the Trap. Strongest, best made, most salable Traps in the Market.

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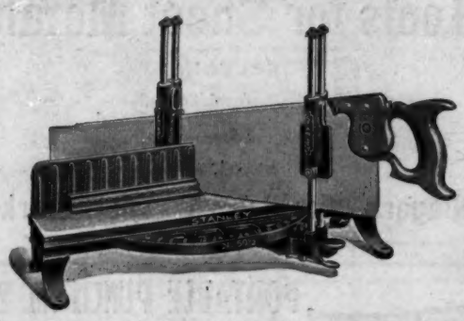
We make all kinds of Brushes and Wire Goods. Started in 1819 and still at it. GET OUR PRICES.

THE BROMWELL BRUSH AND WIRE GOODS CO., CINCINNATI, OHIO.

STANLEY'S NEW MITRE BOX



A Strong and Accurate Tool at a moderate price.

We recommend this box as being thoroughly reliable in every respect.

No. 50½ Without Saw $6.50
No. 60½ With 20 in. Back Saw . . 9.50

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The Stanley Rule & Level Company

NEW BRITAIN, CONN., U. S. A.

DISSTON

SAWS, TOOLS AND FILES

MADE
SOLD
USED
ON MERIT

AND THE CONFIDENCE PLACED IN THE QUALITY AND EFFICIENCY OF THE **DISSTON BRAND** SHALL BE AS WELL-DESERVED IN THE FUTURE AS IT HAS BEEN DURING THE PAST

SIXTY-NINE YEARS

HENRY DISSTON & SONS, Inc.

KEYSTONE SAW, TOOL, STEEL AND FILE WORKS.

PHILADELPHIA, PA.

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention THE AMERICAN ARTISAN

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.
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We Manufacture 12 and 14 Mesh

ALUMINOID

in all widths made of 33 wire.

Heavy in 28 wire.

SEND FOR SAMPLES.

NATIONAL WIRE CLOTH CO., Niles, Mich.

The Highest Grade File Made.

DELTA FILES

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DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

The File You Will Eventually Use.

SCIENTIFICALLY MADE
Pure Copper Cable
LIGHTNING RODS

Our two brands:

"Electra," 7-16 inch, with or without silver colored strand.

"Calumet," ⅜ inch. We use 99⅞% pure soft drawn copper wire.

Fixtures and Ornaments
STATIC MACHINES

We Can SAVE YOU MONEY. WRITE US for price and territory.

"ELECTRA" LIGHTNING ROD CO.
Dept. "T"
CRESCO, IOWA

99 87/100 PURE

That is what a sample of the copper wire tested that goes into our famous Copper Cable Lightning Rod. We want to send you a sample and quote you prices on the best goods there are on the market at a price that will surprise you. We loan you one of our improved static machines with first order for 2,000 feet. Also furnish 25 year guarantees. Write today for agency to

Maher & Son Lightning Rod Co., Preston, Iowa

Lightning Rods

We loan these machines to our customers without charge.

Absolutely Convincing.

We manufacture all kinds of Cable and Section Lightning Rods. Get Our Literature.

E. A. FOY & CO.
450 East Eighth St., Cincinnati, O.

WE HAVE A HARDWARE DELIVERY WAGON THAT YOU CAN DEPEND UPON

Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

Easy to Load and Unload

Durability guaranteed. Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 Edwards St., Sycamore, Ill.

NAILS THAT NEVER RUST

KEYSTONE BRAND GALVANIZED NAILS

CUT OR WIRE

Evenly Coated Perfectly Separated

KEYSTONE NAIL CO., Pittsburgh, Pa.

Send for Catalogue and Prices.

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

Stand In With The Housekeepers

Give them the Jack Frost Ice Cream Freezer and watch them go to making ice cream in their homes.

If you would like to see something doing in the freezer trade this season put in a stock of

JACK FROST
Multiple Motion
Ice Cream Freezers

They are the freezers for family trade.
They will do their own advertising when they get started.
They make ice cream making easy.
Easy turning, quick work, the least ice, and no danger of spoiling the cream with oil or salt water.
Let us send you catalog No. 85 with terms and particulars.

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FACTORY Harrison, Green and Peoria Sts. CHICAGO, ILL. OFFICE 235 South Green Street

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MILLER No. 5905

Steel Case, 1¾ in., enameled black. Self Locking Spring Shackle nickeled. 2 bright nickeled Barrel Keys. This is the only barrel key padlock on the market with WARDS and TUMBLERS, to sell over the counter at 15c each, allowing the Retailer 50% profit. Illustrations and particulars for the asking. Dept. E.

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FREEZERS

"LIGHTNING"

THAT EXCEL IN
Easy Running
Quick Freezing
Economy
Convenience
Practical Results

THAT ARE
Well Advertised
In Demand
Easily Sold
Satisfactory in Use
Of Known Reputation

"BLIZZARD"

THE "BEST MADE" because in practical use, they are convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work. We make also

MACHINE FREEZERS AND ICE BREAKERS

Sold by Leading Jobbers — Catalog Sent Free

NORTH BROS. MFG. CO., Philadelphia

Hardware Shelving, Shelf Boxes, Screw Cases, Etc.

SEND FOR BOOKLET

W. B. Heller & Co.
Montpelier, Ohio

Complete Stock
Carried at our Branch
220-226 Wyandotte Street
KANSAS CITY, MO.

The Original ALL METAL
"POLAR STAR"

No Other "Just As Good" and They Can't Make 'Em Better.

Best materials procurable enter into their construction.
They are purposefully correct.
They are the most inexpensive good articles of their kind on the market.
They allow a good margin of profit to jobber and dealer.
The consumer gets his money's worth—and more.

Write for Full Descriptions and Prices.

Smith & Hemenway Co.
108-110 Duane Street, NEW YORK, N. Y.

- SHELVING -
WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES.
J. D. WARREN MFG. CO. CHICAGO U.S.A.

INTERCHANGEABLE
LOCK-CORNER SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
97-101 Warren St., NEW YORK.

J. F. LEWIS, Cisco, Ill., *writes:*
I cannot get along without THE AMERICAN ARTISAN.

THE **WONDER**
Double Motion Ice Cream FREEZER

The Fastest Growing Freezer in the World

KEEN KUTTER

Fine Smooth Cream in FIVE MINUTES.
Gear Frame Hinged and COVERED.
Cans and all important parts HEAVILY TINNED.
Self-adjusting Double Scraper; this HASTENS FREEZING.
In Freezing Fruit Ices Can may be REVOLVED WITHOUT DASHER.
White Pine Tubs—Strong, Reliable; ABSOLUTELY WATER-PROOF.

A "Down-to-Date" Freezer

Mr. Dealer:
We will send FREE, upon request, ONE SET OF WONDER CREPE PAPER DOILIES. Address your request to Division No. 5.

SEE OUR SALESMAN OR WRITE US FOR PRICES.
SIMMONS HARDWARE CO.
INCORPORATED
Manufacturers and Distributers
SAINT LOUIS NEW YORK

AUTOMATIC SANITARY
ICE CREAM FREEZER

The only FREEZER of its kind on the market.

A Time Saver,
A Labor Saver,
A Salt and Ice Saver

DELICIOUS CREAM CAN BE FROZEN IN THIS FREEZER IN FIVE MINUTES

It has no dasher, crank or gears to get out of order. Its cylinder is rust-proof and absolutely sanitary being made of white enameled steel; inside cover of aluminum. One two, three or four flavors can be frozen at one time as the Freezer is made with 1, 2, 3 or 4 cylinders of 1 to 4 quarts capacity each.

WITH THE USE OF A SPECIAL CAN IN ADDITION THIS FREEZER BECOMES A FIRST CLASS CHURN. :: Send for complete descriptive matter and prices.

THE NEW ENGLAND ENAMELING CO.
MIDDLETOWN and PORTLAND, CONN.
H. GINSBURG, Sales Agent, :: 736 Broadway, NEW YORK.

AGATE NICKEL-STEEL WARE

AGATE L&G Mfg. Co. NICKEL-STEEL WARE

is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade-mark.

Look for the blue label.

Lalance & Grosjean Mfg. Company

Chicago New York Boston

Makes Good Toast

Toast can never be served badly burned or hardly browned when made with the

Perfection Toaster

The flame does not come in contact with the bread at all when this toaster is used. It is spread evenly under a perforated disc and produces a uniform brown and tender toast.

By placing an ordinary cake griddle on top of the toaster a deliciously baked cake will result.

The **Perfection** is the most popular toaster on the market. It will make a hit with your customers.

Write for Prices to-day.

Kinne Mfg. Co., Minneapolis, Minn.

Standard Aluminum Kitchen Ware

BAKING PANS, PIE PLATES, SPIDERS, GRIDDLES, SKIMMERS, SOUP LADLES, SAUCE PANS, Etc.

They will not break or corrode. Food will not spoil or scorch in them.

ASK FOR PRICES AND DISCOUNTS

STANDARD ALUMINUM CO., Two Rivers, Wis.

Cleaver and Tenderer 5—Grades

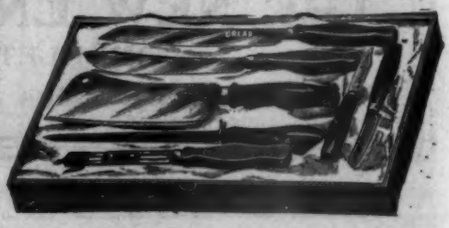
We manufacture a large line of Bread, Butcher, Carving and Paring Knives, Can Openers, Family Cleavers, Shoe and Putty Knives, Wall Scrapers, etc.

WRITE FOR PRICES

No. 501 "SURE-CUT" Can Opener and Cap Lifter

IRA F. WHITE & SON CO.
NEWARK, N. J.

SPECIAL KITCHEN SETS



ELLIOTT
PATENTED FEB. 17, 1903.

GUARANTEE.

THIS IS TO CERTIFY

That.....

of.....

Has an Agency for ELLIOTT ANTI-RUSTING TINWARE. We, the undersigned

The Elliott Manufacturing Company

do hereby warrant and guarantee each and every piece of our anti-rusting tinware against rust.

Should any be returned RUSTED OUT we guarantee to replace it with new goods free of charge.

We insist upon this guarantee being given with every article sold.

IN WITNESS WHEREOF we have hereunto affixed our corporate seal

This.....day of.....1909.

ELLIOTT MANUFACTURING COMPANY
WARREN, ILLINOIS.

Get Busy

Women are planning the making of Wine, Jellies and Fruit Butters from berries of all kinds, currants, grapes, tomatoes, quinces, pineapples, etc. They need the

"Enterprise"

Soon they will be clamoring for the right machine, the only machine that will really do all of these things, the

Fruit, Wine and Jelly Press

Beyond all competition worthy of the name. Guaranteed superior to all other Presses. Directions accompany each machine. Order to-day from your jobber.

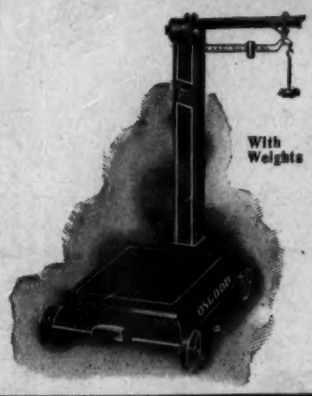
Other seasonable things in our catalogue for every month in the year are the famous "Enterprise" Meat and Food Choppers; Rapid Grinding and Pulverizing Mills; Sausage Stuffers and Lard Presses; Bone, Shell and Corn Mills; Cold Handle Sad Irons; etc.

Get our advertising aids for dealers

The Enterprise Mfg. Co. of Pa. Philadelphia, U. S. A.

21 Murray Street, New York City 438 Market Street, San Francisco

OSGOOD SCALE CO.

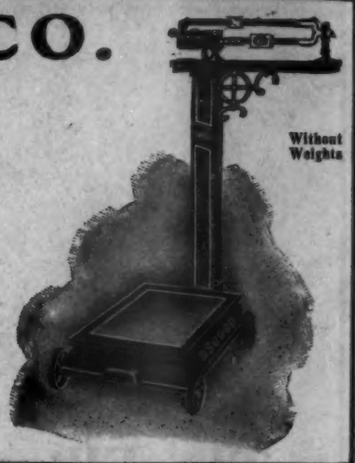


Binghamton, N. Y.

U. S. Standard

ALL KINDS

For Sale by all First Class Jobbers.



High Grade Galvanized Ware

EXTRA Heavy with Red Stripes

Water Buckets

Enameled Wood Bail.

No.	Qts.	Wgt.	Per Dozen List.
2610	10	400 lb.	$4.12
2612	12	475 "	4.34
2614	14	510 "	4.67

Well Buckets

Extra Heavy Wire Bail.

No.	Qts.	Wgt.	Per Dozen List.
2410	10	456 lb.	$4.34
2412	12	504 "	4.67

Wash Tubs

Stationary Wood Handles.

No.	Wgt.	Per Doz. List.
261	90 lb.	$ 9.00
262	100 "	9.83
263	115 "	10.67

Wash Tubs

Stationary Wood Handles. With Wringer Attachment.

No.	Wgt.	Per Doz. List.
2611	98 lb.	$10.00
2622	108 "	10.83
2623	123 "	11.67

Write For Discount.

MANUFACTURED BY

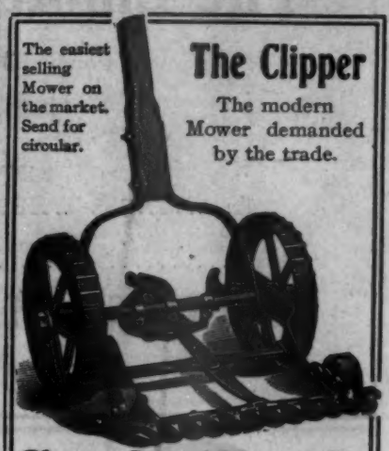
STANDARD STAMPING CO.

ST. LOUIS, MO.

The easiest selling Mower on the market. Send for circular.

The Clipper

The modern Mower demanded by the trade.



Clipper Lawn Mower Co.

DIXON, ILL.

Manufacturer of Hand and Pony Mowers and Marine Gasoline Engines

Washing Machines
Are Staple—
They are good
Things to use
Which makes
Them good
To sell—
That is if
They are
Reliable
Machines.

The White Line
Of Washing
Machines are
Reliable—
Fully guaranteed—
Safe to buy—
And safe
To sell.
Do you
Handle
Them?

White Lily Mfg. Co.

1500 Rockingham Road, Davenport, Iowa.

The QUEEN WASHER

YOUR BUSINESS

DEMANDS that you secure the *Sole Agency* of this washer

It has the merit to make Large Sales for you and offers an opportunity you should not neglect. WRITE TODAY.

Sold to Jobbers only for specified territory.

JAS. H. KNOLL, - - Reading, Pa.

MORE MONEY IN RAZORS.

THE "ESKILSTUNA" RAZOR

(Awarded medals at every exposition.)

That I let you have at $1.00 is better than any $1.75 or $2.00 razor on the market,

No razor made can surpass it in quality, nor is there one that will give greater satisfaction.

Let me quote you price on a single razor, a dozen, or a gross, assorted. Special terms to salesmen and agents.

J. S. STROM, Importer, 7016 South Hermitage Avenue, CHICAGO, ILL.

ELEVATORS

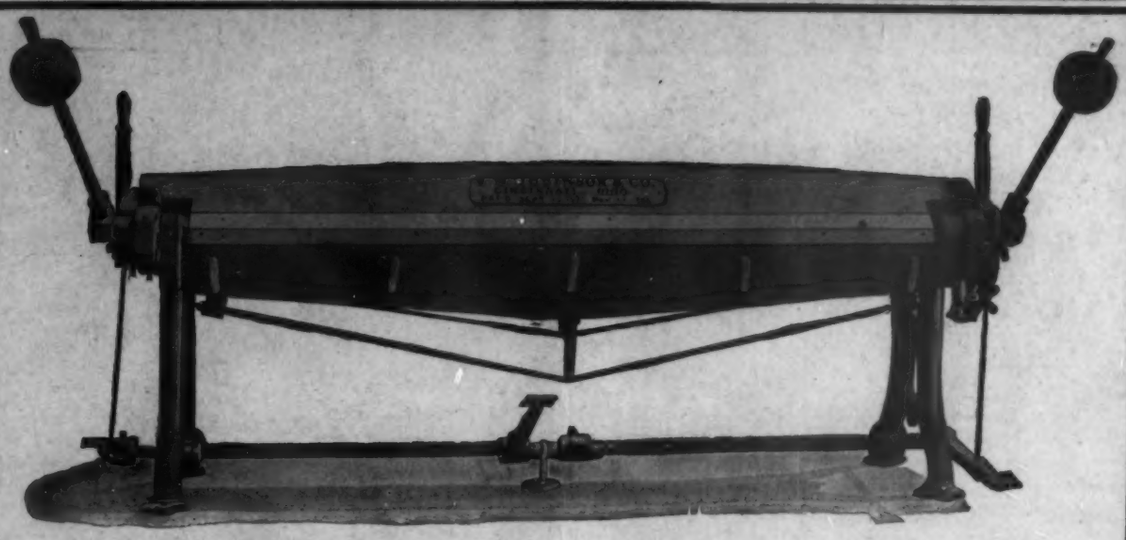
Improved, Quick and Easy Rising Steam, Electric and Hand Power.

SEND FOR CIRCULAR

KIMBALL BROS. CO.

1031 Ninth St., COUNCIL BLUFFS, IOWA

Kansas City Office, Water Works Bldg., Kansas City, Mo.



The above cut shows the general design of our Cornice Brake. These Machines are guaranteed for No. 20 Gauge material and lighter, and with Heavy Bending Attachment for No. 18 Gauge. With each brake is furnished 2½-inch, 2-inch, 1½-inch and 1¼-inch wood formers, and 1-inch, ⅞-inch and ¾-inch iron forms, also friction clamps for holding same. All machines are fitted with foot treadles, quadrant gauge and three quadrant stops.

WRITE FOR CIRCULAR.

The J. M. Robinson Mfg. Co.

SHEET METAL WORKING MACHINERY

Spring Grove Avenue **Cincinnati, Ohio**

Every Store Should Have One!

THE AMERICAN ARTISAN ADVERTISING MANUAL

Retail merchants are to-day doing more advertising than ever before. They are doing better advertising also. With a little assistance most retail dealers could prepare very effective advertisements. To supply this assistance is the mission of this volume.

It contains 278 pages and 228 illustrations of advertisements which have actually appeared in newspapers. It contains innumerable hints, suggestions and helps that every dealer will find valuable. It is brim full of information for those who prepare their own advertisements.

Every merchant should secure a copy. **The Price is $3.50 Per Copy.**

For Sale by your Bookseller or by

DANIEL STERN, Publisher, 355 Dearborn Street, Chicago, Ill.

HIGH POWER **"STANDARD" RIFLES** **HAMMERLESS REPEATING**

AUTOMATIC and HAND-OPERATED

TAKE DOWN

SIX SHOTS

THE RIFLE OF TODAY

Has so many points of superiority that you really can't afford to overlook them. Get advance information now, so that you can order from your jobber as soon as the Rifles are on the market.

Ready About JULY 1st.

STANDARD ARMS CO., 133 F Street, Wilmington, Del., U. S. A.

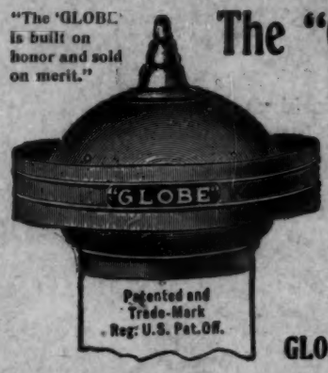
FER. NOT ENT'D.
JUN 28 1909

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and has the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.

STAY-IN Flue Stoppers

are **guaranteed** to be absolutely soot proof. Cannot be jarred or blown from the flue hole.

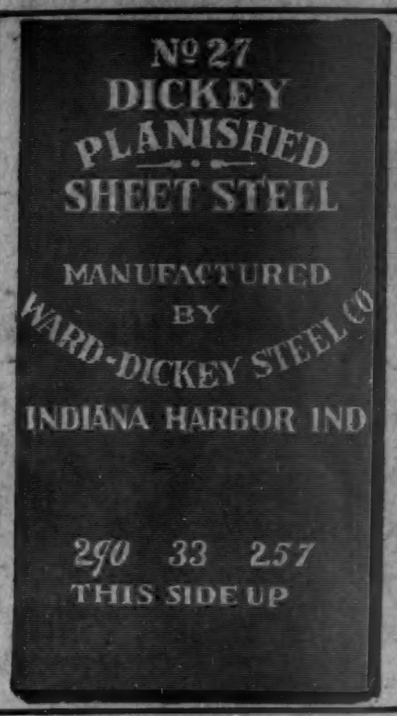
Finished in Brass and Nicely Decorated

MANUFACTURED BY
STUBER & KUCK, Peoria, Ill.
We Also Manufacture PIECED TINWARE and All Styles of FLOUR SIFTERS

"I'M GOING TO STICK TO SCOTT'S"

That is what one of our customers writes after a short experience with other makes of Roofing Tin. He states further that there is no other plate as uniformly good as

SCOTT'S EXTRA COATED
HAMMERED OPEN HEARTH
ROOFING TIN
MADE BY
FOLLANSBEE BROTHERS COMPANY
PITTSBURGH



Of what us will the Pan ama Canal b to the Unite States, wit no merchan ships to sa it?

It would co less to buil another nav and station in the Pacifi —"Johnny o the Spot."

A HANDSOME PROFIT
can be made on every item of our justly celebrated

Enameled Ware, Tin Ware, Japanned Ware and Galvanized Ware

This **Water Pail** i only one of our lin of many salabl goods consisting i all of

OVER 500 FAST SELLING ITEMS
Star ★ Enameling & Stamping Co., PITTSBURGH, P

Drink Pure Wate

The **No. 50 Star Pump** shown here will p tively purify the water in any well or cistern short time.

This purifying feature alone makes it the pump fit to put in any well where the wat used for household purposes, for it will su save its cost in the doctor's bill many times o

As it is made of No. 24 gauge galvanized ir is a very substantial and handsome outfit, will last for years.

Our line of purifying pumps is very comp So is our line of Galvanized Chain Pump C and Tubing.

Ask your jobber for Star Pumps.

Star Bucket Pump Compa
ST. LOUIS, MO.

YALE
Russia finish, pat. Lock
STOVE PIPE
It is made of a very high grade of uniform color Blue Polished Steel and iscoated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the Jobbing Hardware Trade throughout the United States. Mfg. by **HEMP & CO.** 2nd and Chouteau Avenue, ST. LOUIS.

In the event your jobber does not handle this pipe, send your inquiries to us.

The **"CENTENNIA**
RAIN-WATER-CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapo